6.x (who knows?)   Less bugs (there are much less already).

6.0.5 (08/01/2006)   Fixed the wrapper crashing when it receives information from a plugin that it's removing
(bugfixes!)   Fixed FPC crash when changing pad names from the Pads tab
Fixed tempo bug in envelope controller
Fixed bug saving adsr wheels in Envelope Controller
Fixed decimal point bug in Formula Controller
Little bugfix in Fruity Slicer
Fixed wet level in Fruity Squeeze

6.0.4 (28/12/2005)   Fixed non-working shortcut in playlist.
(bugfixes!)   Fixed built-in sustain support.
Fixed crash while detecting sample tempo.
Fixed wrong reloading of sample loop type.
Fixed bug in audio clips volume envelopes.
Fixed patch selector in Dashboard.
Fixed score selection in FPC when an empty folder is selected.
Fixed bug in FPC and Fruity wrapper that caused drag and drop to stop working.
Fixed bug in Fruity Wrapper showing the selection menu when loading songs with a
Waveshell plugin.
Fixed dual screen bug showing all menus on the wrong screen when the primary screen was
on the right side of another screen.
Fixed bug with echo delay presets in channel settings.
Rare bug fixed in Sytrus delay line.
Fixed browser being able to be resized when docked.
Fixed mixer send knobs animated when the wrong track was selected.
Added option to disable smooth scrolling (in FL, not plugins).
Added warning when loading projects made with a more recent version of FL.
Made overload-safety feature in audio settings optional (for those who have ASIO troubles).
Fixed bug in EQUO when processing was skipped.
Middle click to load projects from browser now prompts for saving.
Fixed looping and song position in FL DXi when used in Sonar 4.0.3 or later.
Fixed rendering bug in Fruity Squeeze.
Fixed bug that caused some DXi plugins to ignore note messages.
Fixed EQ slider hint.
Fixed Fruity Fast Dist bug when rendering.
Fixed bug when moving plugin racks while event editor was open for one of their parameters.

6.0.1 (08/12/2005)   **FL now compiled with Delphi 2005.**
New popup menu engine.
New scale-detecting helper in piano roll.
Multiple MIDI input devices are now accepted.
MIDI clock sync can now be sent to multiple MIDI devices.
All control events can now be edited in the piano roll.
Edited events are now stored in a most recently used list.
Piano roll now offers 16 note colors (that can be seen as MIDI channels).
Piano roll helpers also mark notes that have names (useful with Fruity Slicer).
Can now drag individual slices from the Fruity Slicer onto channels (or the explorer),
and copy them to the Windows audio clipboard.
Revamped mixer with enhanced free track routing (all tracks can now be sends).
Piano kb keys now accepted in the MIDI remote control box (white = toggle, black =
latch).
'New 'Link all parameters' option in plugins & mixer'
Can now move mixer tracks around.
New glue tool in piano roll, to glue contiguous notes.
Can now replace a channel type by another (was already doable through presets).
Various other enhancements in the piano roll.
Support for MIDI hold & sostenuto with result directly in piano roll.
Minor usability improvements.
Ctrl+mouse wheel to center-zoom at the mouse position in event editors, piano roll & playlist.
Improved stability/safety for ASIO devices.
Little bugfix in automation clips.

Drag/drop now works on detached playlist.

Speed improvements.

Knobs animation is now smoother (for those who can notice).

Browser revamped visually, with various little enhancements.

Browser smart search feature, allowing things like <sytrus or sims?nth or wav and "rev* bongo">.

Browser updated to remember its last state, visual drag/drop.

Browser now monitors FL's data folder to refresh itself.

Browser can show all file types & their extension.

Added browser snapshots.

Dropping a file onto the browser jumps to that file (providing it's available somewhere in the browser).

Sytrus: arpeggiator built in envelopes, audio file to envelope analyzer, envelope vertical flipping.

Sytrus: can now drag/drop single-cycle shapes onto harmonics editor, or channel button.

Sytrus: waveforms can now be saved to (32bit) WAV files.

Sytrus: enhanced waveform editing tools.

Sytrus: added 4 new filter types.

Sytrus: can now lock harmonics individually.

Sytrus: can now drag waveforms (click big waveform or ctrl+click small one) onto other synthesizers.

Small mini-piano roll update bugfix when project browser is open.

"Typing kb to piano" feature now works from the browser window as well (accel chars now only work in the tree when the feature is off).

Bugfix in level scaling event editor tool.

New EQUO automatable equalizer plugin.

New Fruity Reeverb 2 plugin.

Fruity Slicer: loading/slicing drumloops doesn't break audio engine anymore.

Live mode: song relocation is bar-synchronized.

Alt+/* and Ctrl+Alt+/* to jump to/select next/previous song markers.

Misc little enhancements: middle mouse button in browser, mouse wheel working in some new places, etc.

Added support for some more hardware controllers.

Ultrasmooth visual feedback now off by default and sets a higher smoothness, and also now applies to fruity plugins.

Playlist pattern lane gets a popup menu, and selected patterns can be renamed all at once.

Added option to split (explode) a pattern by channel.

Shift+piano roll/playlist cut tool now selects a column.

Alt+click in piano roll/playlist/event editor bypasses the current snap (very handy).

Shift+left/right or Alt+left/right shifts (nudges) selected notes in piano roll/playlist.

Bugfix in audio recording undo, and also made it clearer (tells which files are gonna be undone).

Can now edit note properties to change a note into a slide.

Added workaround for minor Windows graphic bug in the playlist.

Added CC standard names to popup in MIDI remote control box.

Shift+mouse wheel to scroll playlist, shift+right click for playback tool in piano roll, and various similar little enhancements.

Can now jump to song markers using MIDI input, and create them on the fly.

Wrappers publish 128 extra parameters for CC's, so that you can control a VSTi without using a MIDI out channel in most cases.

FL can now send MTC as well as MIDI clock for output synchronization.

Support for multimedia keyboards (play/pause/stop/prev/next/browser keys, etc).

Newbie enhancement: long audio files are not kept on disk by default anymore.

Option to save audio & MIDI clipboard data to files (see tools menu).

Double-right-click piano roll & playlist brings the options menu.

Better support for the Korg MS20 controller: cable in/out are mapped to CC to work as switches.

Enhancement for tablet PC's: most forms states are saved per screen resolution (handy when switching from landscape to portrait mode).

Enhancement for tablet PC's: stylus mode that allows easier tweaking of knobs as well as several little usability improvements for pencil use.

App includes a 128x128 icon size for application bars (ObjectDock, etc).

LAME DLL now loaded dynamically (to avoid problems when FL is used as a plugin).
Little fix for piano roll splitter losing its aspect ratio when resizing the window.
Less flicker when resizing some windows (unless detached).
New 'one-click recording' option for dummies (in the tools menu).
Added auto-map all ASIO inputs (just like outputs), to monitor all inputs.
New Fruity Squeeze sound degradation plugin.
FPC: volume and pan envelopes per pad.
FPC: pad presets and note layouts.
New Wasp XT synth plugin.
Wrappers now automatically save plugin specific settings (optional).
Video player now has an option to disable rendering audio.
New GM preset for DrumSynth Live.
Added support for Frontier Design's TranzPort controller.
Piano roll note properties can now show note lengths (optional).
Alt+mouse wheel to change note properties (of the closest note, or the selected ones) in piano
roll & SHIFT+mouse wheel to move them around.
Caps lock to move notes without changing their ending times in piano roll.
More accuracy in the drawing of events in the piano roll.
Browser now shows .FNV (envelopes), .DWP (DirectWave) and .FXP/.FXB (VSTi patches).
New Fruity Envelope Controller plugin.
New DirectWave sampler plugin.
New Chrome visualization plugin.
Fruity Slicer can now export sliced sample.
New sample and preset downloader for FPC and DirectWave plugins.
Existing automation clips are now adapted when the PPQ settings have changed.
Added workaround for UAD-1 plugins to work.
Cue points are not turned into regions anymore.

5.0.2 (26/01/2005)   New key limiter tool in piano roll.
New score flipper tool in piano roll.
New level scaling tool in piano roll & event editor.
Little bugfix in note legato tool.
Right-click piano roll options button for direct access to tools.
New 'Arrange windows' item to leave room for the bottom taskbar (handy under Windows XP).
Keyboard shortcuts now work for detached windows.
Updated to LAME 3.96.1.
Fixed XI file loading bug.
Added per-editor snap override.
Minor UI enhancements.
Slightly improved 'prepare for MIDI output'.
MIDI remote control window now shows a list of all controllers linked to a parameter.

5.0.1 (20/12/04)   Fixed 'Add pitch to key' for plugins.
(bugfixes!)   Fixed crashing bug in Fruity Granulizer.
Fixed 2 minor bugs in Sytrus.
Fixed problem with MIDI input in FL VSTi versions.
Fixed little problem after dismissing the piano roll note properties box.
Fixed disabled automation clips processed when relocating the song.
Disabled looping for sample preview in browser (too many bad loop points in samples out
there).
Auto-scrolling doesn't switch off anymore when editing and the song is not playing.
Fixed problems with dual monitors: FL can now be maximized on second monitor and will
remember the monitor it's on when maximized.
Fixed little playlist shortcut problem.
Added option to detach playlist, piano roll and event editors from the working area (can be
maximized on a second monitor).
Changed the default wallpaper to a newbie one.
Newbie enhancement: MIDI settings window doesn't show up anymore to let the user select a
MIDI input device.
Newbie enhancement: "Enable MIDI input/output" switches itself on when you select MIDI
devices.

5.0 (20/11/04)
New automation clips in playlist.
New powerful arpeggiator tool in piano roll.
New Fruity WaveShaper effect plugin.
New option to render audio files with slice markers (regions) built-in (regions are defined as beat markers for Adobe Audition).
Fruity Slicer now gets slices from audio file cue points as well (as well as trigger key #).
Much improved Fruity Slicer, with stretching and REX loops support, and enhanced fill gaps.
New 'make unique' option for audio clips to sever parts.
New time-stretching and pitch-shifting in audio tracks (with several modes, including the Elastique engine).
Tempo-synced preview of stretched samples.
Added author & genre to song properties, saved inside WAV files and MP3 tags.
Added tempo detector to audio tracks to align project tempo to song clips.
New drum flam tool in piano roll.
DrumSynth Live now supports 120 patches.
Enhanced Fruity Granulizer with transient-alignment and new skin.
Audio recording can now be undone, and mixer track arming button can be right-clicked not to prompt for a filename.
Added note legato and articulation tool in piano roll.
Basic loop recording.
Added tempo tapping feature.
New FPC drumkit plugin.
New Collab tool to work on shared projects.
Added better automation smoothing to MIDI remote control (knob works as 1 pole or 3 poles).
Can now load MP3's into sampler channels and audio clips.
Setting for steps per beat now adjust tempo as well (no need for tempo-doubling tricks anymore).
Fruity Slicer note dumping is now done in piano roll selection (if any).
New slicing engine in Fruity Slicer and FL (audio clips).
Stacked notes in piano roll randomizer now work better.
Made brush default tool in event editor.
Little bugfix for monophonic mode in step sequencer.
Restyled Fruity HTML NoteBook plugin.
Background wallpaper can now be HTML pages.
Bugfix in Sytrus (making it a little faster).
Added copy/paste preset to Sytrus, to share presets between all plugin versions of it.
Added global envelope mode to Sytrus (version 1.2), for perfect gated presets.
Fixed crash when deleting MIDI out channels sometimes.
Song markers now properly stored in rendered waves even with tempo changes.
Fixed memory leak in Fruity Slicer plugin.
Updated drum list in the MIDI out plugin to the GM2 standard.
Made channel resampling option always enabled.
'Keep on disk' samples can now be modified (loaded from disk when needed).
Can now check 'keep on disk', 'resample' & other options even when not possible.
Newbie enhancement: snapping is off by default.
Can now drop samples onto the channel settings window.
Preview now only loads the few first seconds (for MP3's to preview faster).
XY controller now supports multiple joysticks.
Right-clicking the recording disk to arm a mixer track won't prompt for a filename.
Added option not to auto-unarm mixer tracks.
Selecting an ASIO input now arms the mixer track automatically.
Added option to trim audio clip parts outside playlist selection.
Auto-envelope cleaning in step edit mode in Sytrus & Fruity Waveshaper envelopes.
Remove transposing from quantization tool - quantization scores can now safely contain notes other than C5.
Toolbars can now be locked.
Replace 'Ignore velocity' option by 'Velocity link', to control per-note filter using velocity.
Can now shift+click note events to unselect them.
Can now set one of the external audio editors to replace the default one.
Added support for Hercules DJ Console (when set in MIDI mode, endless knobs, coupled

switches, special switches & middle jog work).
Added sampler interpolation method selector for realtime playback (audio settings).
Removed obsolete 1..9 pattern selector.
FST and FSC file extensions are now associated with the app (and loaded in new channels).
Auto-scrolling switch now in the main part of the UI, and auto-disabled.
Song selection now shown in the transport slider as well.
Minor cosmetic changes and new wallpapers.
Shift disables 'typing keyboard to piano' feature, handy to access shortcuts such as R for record.
BkSp shortcut for quick snap switch.
Fixed problem with incoming MIDI note off messages too quickly after note on.
Minor fix in Fruity Vocoder.
Removed (abused) live loop, in favor of Collab.

4.5.2 (4/03/04)   Upgraded plugin menus: easier way to browse/automate parameters.
Added 3 band equalizer and soft mode option in Sytrus.
Added option to use mixer position as playback position, for those who have crappy sound drivers and experience jerky playback cursors.
Small bugfix in event editor zoom/select.
Small bugfix in effect preset selector.
Bugfix in Sytrus (was unstable).
Little glitch fix in Sytrus.
Changed scale for harmonics level editing in Sytrus.
Fixed problem with some ZIP files not created (really this time).
Small bugfix in automation recording.
Fixed arp/slide last bugs (I hope).
Fixed tiny visual glitch in browser.
Notes in step seq now restricted to the channel's keyzone.
Added repeat mode to arpeggiator.
Sytrus presets are now compressed (was needed for the VSTi version).

4.5.1 (29/12/03)   **New Sytrus generator!**
New 'auto' mode in arpeggiator (finally works like a classic arp now).
New playback function in piano roll.
New strum tool in piano roll.
New Fruity Flangus effect plugin.
New ReWire (host & client) support.
Playlist / piano roll selection now updated when changing PPQ.
Added ASIO clock source selector (for compatibility with the Tascam US-122)
Added ASIO CPU check for more stabillity (prevents freezing GUI).
Removed the obsolete 'tiny slices' rendering setting & improved rendering.
Added beep metronome sound.
Bugfix in Fruity Slicer plugin.
Bugfix in channel grouping while loading songs.
Little bugfix in playlist.
Little bugfix in preset switching.

4.5 (3/11/03)   Bugfix in FL Keys & dashboard plugins.
(boxed release)   Added support for the Edirol PCR-30/50 controllers (see \System\Hardware specific).
Little bugfix in layer loading.
Little bugfix in automation smoothing.
Added warning when saving to a protected MIDI file.
Inserting space in playlist now moves markers as well.
Editing playlist markers is now undoable.
Bugfix in 'zoom on selection' in piano roll.
Alt+click to default note levels in piano roll.
Small bugfix in PPQ changing.
Bugfix in playback indicators in piano roll.
New free Slayer & FL Keys plugins (actually were in 4.1.2).
Improvement: arpeggiator now works fine with short single-hits.
Don't ask why it's a 4.5 version already :)

4.1.2 (1/07/03)　　**Added automation smoothing feature.**
Added Fruity Keyboard Controller plugin.
New undo history in project browser.
Added 'insert/delete space' in playlist, piano roll & event editor.
Now showing plugins & their parameters in the project browser.
Added output visual to Fruity Formula Controller plugin.
Improved internal controller handling.
Improved pattern merging.
Fixed rare automation problem.
Fixed handling of special audio input format.
Event editor LFO tool can now be cancelled.
Bugfix in MIDI file import for controllers.
Small bugfix in Boobass plugin.
Sampler channels now load 24Bit integer wave files.
Fixed small bug in Fruity Slicer.
Fixed small weird bug in plugins.
Fixed sampler channel filters consistency accross sample rates. Projects not made at 44100Hz might sound a little different!
Small fix in Fruity Parametric EQ at 22000Hz.
Small fix in filter for Fruity Delay 2.
Small visual fix in Fruity Slicer.
Bugfix in Fruity Phaser plugin.
DS script loading bug (on some systems) finally fixed.

4.1.0 (7/04/03)　　**Many bugfixes.**
(bugfixes!)　　　　**New cool (and free) vocoder plugin!**
Added CTRL+N shortcut for 'Save new version'.
Added 'Link selected channels -> Starting from this track' to easily auto-assign mixer tracks to existing channels.

4.0 (5/03/03)　　**Brand new playlist.**
(FL Studio)　　　**FX window becomes a mixer.**
Audio clips can now be added to the playlist.
Fruity Slicer now auto-slices without the need for a registered BeatSlicer. Same for the 'File->Import->Beat to slice' feature.
Added audio input (ASIO only) to the mixer.
Added direct-to-disk recording & offline rendering of mixer tracks.
FL Studio now available as a DXi plugin (FL Studio DXi, FL Studio VSTi, 1 & 16 out versions).
New Wave Traveller generator plugin.
New BooBass generator plugin.
Revamped randomizer, now also available in piano roll.
New integrated wave editor for channel samples.
Fixed minor TS404 preset problem.
New cutting tool to piano roll & playlist.
Small bugfix in SimSynth Live.
Mixer now has 64 insert tracks.
Mixer tracks can route to other mixer tracks, allowing groups & sub-groups.
Effects now have automated mute & mix level.
Can now save mixer track presets.
Patterns can now have different lengths.
Can now set pattern color.
New black note display mode in piano roll.
New brush mode in playlist and piano roll.
New time scaling in piano roll (hold shift & resize notes).
Various improvements in piano roll.
Right-clicking the mini piano roll jumps to the clicked position.
New time markers in playlist (numpad . to jump to the next one).
Time markers are saved in rendered waves as cue points.
Reworked & added some new artwork.
Fixed small bug in envelope display.
Fixed small bug in event editor line tool.

Fixed MIDI sync output device not remembered.

MIDI sync device is now shared with MIDI output devices.

Can now record in song mode into a pattern that hasn't been triggered (pattern is then added to the playlist).

Can open the project browser from the playlist.

Added some 3DNow! optimization (Fruity Parametric EQ & various internal things now 2x faster on AMD's).

Added graph in remote control mapping window.

Fixed precomputed effects at other sample rates.

Fixed FX send automation bug.

Added phase randomness option to 3xOsc plugin.

Added autoscrolling in playlist.

Added some usability improvements.

Omni mode also works for mixer in remote control window.

Changed the way some plugins work with timers.

Can now set the track in which preview & metronome are mixed.

Fixed bug with GDI in browser.

Fixed window visibility bug.

Added live mode to playlist.

Fixed invalid automation problem after loading presets over a TS404 channel.

Fixed rare bug with event editor's line tool.

Slightly updated look of the Fruity Slicer.

Old precomputed effects are now hidden by default.

Rendered wave files now have loop points, useful when rendering using the leave remainder option.

'Save modified sample as...' now saves loop points.

Audio clips can be chopped up into regions (cue points stored in wave files or slices stored in ZGR's).

Pattern cloning now clones automation.

Fixed GDI leak in Fruity NoteBook.

Updated LAME mp3 encoder to version 3.93.1.

Various bugfixes in FL VSTi.

Support for multiout VSTi plugins (generators only).

New wave editor.

Small improvement in BeepMap plugin.

Step sequencer editing is now undoable.

Fixed rare note-dragging crash in piano roll.

Fixed glitch in sampler channels.

3.5.6 (29/07/02)
(more bugfixes!)

Support for Tascam US-428 controller.

Formula in MIDI remote control box can now modify increment step (for endless knobs).

Can now select rows of notes in piano roll.

Added 'fit to time' option to Fruity granulizer.

Fixed weird rare automation bug.

Improved wrappers & fixed timing info.

Added 'pausing steps' in some knobs & sliders.

New user interface for SimSynth Live.

VSTi version now renders properly in Cubase.

New clock toolbar.

Changed tempo & pattern selectors.

Fixed Wasp's envelope link problem.

Fixed small playlist selection bug.

Fixed various minor bugs.

3.5.5 (4/07/02)
(bugfixes!)

Bugfixed DrumSynth Live.

Time hint in step sequencer.

Added support for Peavey StudioMix controller (knobs, sliders, switches & jog).

Added support for StudioMix switches.

Added support for 'endless' hardware controllers (Doepfer Pocket Dial).

Setup now warns about logging as administrator.

Various other bugfixes.

Formula presets in MIDI remote control box.

3.5.4 (19/06/02)   **Can now copy, paste, save & restore automation.**
FruityLoops now available as a VSTi plugin.
Multi ASIO output added.
New advanced quantization in piano roll.
New advanced pattern-based chopper in piano roll.
Improved channel envelopes (tension).
Added batch export of FX tracks into separate wave files.
New Fruity fast dist plugin (same dist as for the TS404).
New Fruity soft clipper plugin.
Improved Fruity slicer plugin (added 'fill gaps' option & slice reversing).
Improved global beat slicing (layering).
Improved Fruity wrapper plugins.
Added recording precount.
Support for speech synthesis (.speech files).
Added sample start to Fruity granulizer plugin.
New step edit mode.
Much improved (but not compatible) TS404.
Fruity wrappers now support DXi2 plugins.
New kick synthesizer plugin.
Improved (but slower) sinc interpolation (thx to arguru).
Improved hermite interpolation (now 6 points) (thx to Yehar).
Right click metronome for another tick sound.
Right click wait for input to allow it only when recording.
MIDI activity LED now blinks yellow if the MIDI message wasn't handled (assigned to nothing).
Master sync now sends MIDI continue message instead of MIDI start.
Time in seconds now displayed by the playlist in the hint bar.
Project bones now includes automation as well.
Fine time offset knob now automatable (can now do shuffle using internal controllers).
Peak meters optionally in dB format (see general settings).
Tiny bugfix in envelope processing.
MIDI out plugin now supports channel aftertouch (& also redesigned visually).
Removed unuseful auto maximize & stop at bottom options.
MIDI remote control window redesigned a little.
Added quick preset randomizing & hybridize mode for plugins.
Slightly improved pattern humanizer.
Fruity soundfont player now searches for the first valid patch after a soundfont is loaded.
Added 'explore' menu item to browser.
Added 'Select linked channels' option & FX track renaming (effects window).
Bugfix in soundfont player & improved HQ rendering.
Bugfix in echo delay combined with the time shift.
Bugfixes in Fruity reeverb (now works fine at any mixing rate).
Small bugfix in channel muting.
Small bugfix in layer channels.
Small bugfix in Fruity slicer (sample rate conversion).
Small bugfix in step seq vol knob's gauge.
Color=$BBGGRR now recognized in browser info files.
Fixed two bad memory leaks.
Bugfix in DrumSynth patch loader.
Improved step sequencer.
Mouse wheel now scrolls step seq keyboard edit.

3.4.0 (19/12/01)   **Added fat mode to channels (echo delay tab).**
New input to output mapping formula in remote control linking.
Added Fruity formula (internal) controller plugin.
New Export->Project bones (exports all channel & effect presets + scores, to merge projects easier).
Introducing channel filtering for easier reading of the step sequencer.
Introducing layer channels, to control several channels at once.
Fixed the freezing on some systems with the MIDI output enabled.
Added activity meter to channels.
New Fruity chorus plugin.

New Fruity DX10 & SoundFont player plugins.
Can now move patterns (or blocks of patterns) up/down (see playlist menu).
New 'save new version' option.
Note properties editing in the piano roll now works only for selected notes, if any.
View all channels (ghost) mode in piano roll.
Added vertical zoom in event editor.
Added tempo fine tuning (song settings).
Relooked testing kb, now with visual feedback & layer key zones.
Removed 'shuffled' option in channel's echo delay.
Added 'Play to end' option to Fruity slicer plugin.
Arpeggiator time to max = holding.
Added 'add root note to key' feature (useful for Fruity slicer & Fruity soundfont player).
Fixed patch not restored by the MIDI out.
Fixed last MIDI device not working for MIDI output sync.
Samples with loop points stored in wrong order are now loaded properly.
Little startup things are now set to better default values.
Removed raster visual effect in event editor.
Removed random association, replaced by the channel layering, better but uncompatible.
Channel aftertouch now mapped to #253 in MIDI input mapping (key aftertouch=#254, pitch bend=#255).

| 3.3.0 (16/10/01) | **Multiple MIDI devices can now be controlled at once.** |

Introducing internal controllers.
New Fruity stereo enhancer plugin.
New Fruity delay 2 plugin.
Added 2 FX send tracks & up to 8 plugins per track.
Better plugin lister, now verifies & sorts plugins.
New, rather accurate, global (multichannel) MIDI file import.
Added portamento to all channels.
Added velocity & kb tracking to all channels.
Added ASIO output (no multichannel output, will be done, don't ask).
Fruity wrapper can now read *.FXB files.
Added portamento's in step sequencer & per-channel gating.
Added Fruity Slicer, Fruity Granulizer, Fruity Big Clock, Fruity dB meter plugins.
Added Buzz machines wrapper (generator & effect) plugins.
Added levels adjustment per channel, for easier automation & preamp.
Added pitch per note in the piano roll.
Effect plugins can now be named.
Changed knobs popup menu (added 'Copy value' & 'Paste value')
Got rid of the 'filenames with spaces in them loaded as several files' problem.
Improved sample view in channel settings.
Bugfix in plugins custom shapes.
Fixed minor bug in FX sends.
Remote control mapping now updated when modules change.
Remote control mapping now saved in FLP's, not as a general config anymore.
Bugfix in channel FX track # automation.
Bugfix in channel settings repaint (very rare & harmless bug).
Fixed thing in levels ramping (rendering with 'tiny slices' on is now perfect).
Added a wallpaper (Title.jpg).
Minor bugfix in mixer.
Removed Export->Click marked samples option (hello alt+s freaks).
Fixed rare bug in mixer.
Fruity plugins own data can now be collected & included in zipped loops.
Small bugfix in plugin preset selector.
Added a couple of new 3xOsc presets.
Fixed some disappearing cursor problems.
Fixed bug in sampler channels envelopes & MIDI remote control.
Note properties box now also works on selected notes in piano roll.
Added features to the 3xOsc.
Added automatable gate time in channels (FUNC tab, mainly for the step seq).
Little bugfix in volume envelope attack.
In pattern mode, the whole pattern is now rendered, not just the first bar.

Remote control mapping now listed in the project browser.
New, better set of fonts.
Updated LAME mp3 encoder to version 3.89.
New bugfixed Fruity Scratcher, WASP & Fruity phaser plugins.
Fruity Spectroman can now display in stereo.

3.1.1 (3/05/01)
Bugfix in song relocation.
Small bugfix in project browser.
Small bugfix in 'Go to next empty pattern'.
Added Fruity LSD & Fruity Spectroman plugins (reg. only).
Added log decay switch to envelopes.
Changed sliders a bit.
Updated Fruity plug SDK.

3.1.0 (11/09/02)
(boxed version)
Project (automation) browser.
Now supporting DXi plugins!
Piano roll data can now be copied from the step sequencer.
Added 'Init with current position' in event editor.
Added right click on snap selector for stock note lengths.
Fixed Jedi mode :) disappearing mouse cursor problem.
Wrapped VST plugins now save their state into chunks (useful for the BS-1).
Bugfix in Fruity Mute 2.
Harmless bug when closing 2 event editors at once fixed.
Removed background wallpaper centering.
Favorites now available to channels as well.
MIDI input now handles start / stop / continue messages.
Added (dirty) workaround for taskbar covering problem.
Cyrix problem finally fixed!
Minor bugfixes.
Added project uploading feature.
New user-made MIDI out presets.
Turned auto snap into auto smoothing in event editor.

3.0.1 (26/02/01)
Arpeggiator for each channel.
Exporting to MIDI file now works.
Small bugfix in mixer & pattern playing.
Effect version of Fruity wrapper plugin now properly listed.
Minor bugfix in channel's edit menu.
Bugfix in closing piano roll.
Minor bugfix in MIDI out plugin.
Various bugfixes in wav renderer (can now render a playlist selection properly).
New user-made MIDI out presets.
Improved dropping of audio tracks into the playlist.
Improved auto channel naming.
Introducing *.FSC FruityLoops score (piano roll) presets.
Minimized mode in piano roll.
MIDI files now appear in the browser (to be dropped onto piano rolls) as well.
Plucked! & 3xOsc plugins now support custom shapes.
Pattern (visual) length now saved in projects.
Various other improvements.

3.0.0 (25/01/01)
New layout.
Piano roll.
Event track now per pattern.
New FX tracks (now 16 inserts + 2 sends)
Centered views for some controllers in event editor.
Optimized song positioning.
Typing keyboard to MIDI option.
Added metronome.
Updated to new DrumSynth renderer.
Added custom controls for DrumSynth presets.
Channel mute switch & FX track # are now automated.

MIDI controllers can now control several channels at once.
Fixed syncing problem.
New MIDI output plugin & much better MIDI support.
New plugin system (effects & generators).
New plugins: 3x Osc, BeepMap (image synth), Fruity PanOMatic, Fruity NoteBook, MIDI out, etc.
Slight optimization in TS404.
Added MIDI kb to mute/solo mapping.
Peak meter now shows clipping.
Knobs should work better under Win2k.
Added new filter types.
New, better pattern randomizer.
Fixed ugliness with system fonts set to large.
Added 'smart disable' feature in effects.
Added antialiasing to TS404 (rendering only).
Much more...

2.7.1 (25/09/00)   **Small bugfix release:**
Fixed problem with some Win2k configs & registration.
Fixed small problem with multiple monitors (again).
Fixed little bug in TS404 starting note.
Fixed minor bug in event editor.
Fixed right click on loop icon in playlist.
Fixed minor visual bug in title bars.
Fixed minor bug in sample display.
Fixed bug in playlist hint.
Bug in 3DFX display drivers avoided (they've fixed it too).
Improved Fruity reeverb plugin (no more slowing down).
Much faster sample locating.
Added Fruity phaser plugin by Smart Electron:x.

2.7.0 (22/07/00)   **LP x2 filter added to channels.**
Global channel LFO added, handy for basslines.
Beatslicer standalone editor added.
Alternate B-splines interpolator in event editor (right click).
Snap mode (with interpolation) in event editor.
Added presets to envelope time wheels.
Added a couple of great instrument presets.
Added dithering to 16Bit option (rendering only).
Improved SS2 preset renderer.
Updated LAME mp3 encoder to version 3.84
Surround effect removed, added 'Fruity phase inverter' to replace it.
Fruity Fast LP plugin added (the main filter will disappear in a future release).
ZIP & RBS ext added to sample browser, & FLP's are shown in all folders.
Fixed envelope LFO shape not saved in FLP's.
Bugfix & slight optimization in TS404.
Had to remove bitmaps from song info edit, too much buggy :(
Bugfix in filter section (was always on... eating unneeded CPU).
Fixed 2 bugs in TS404 preset loading.
Bugfix in pattern rendering when playlist has a selection.
Bugfix in main oscilloscope.
Fixed random association not saved properly.
Added 'Don't limit windows to screen' option for multimonitor support.
More safety checks for 'altered project' flag.
Graphic engine changed, now eats a lot less graphic resources.

2.5.4 (6/05/00)   **Added LP, BP, HP & Notch to channel filter.**
Support for plugin presets (sample browser).
Bugfix in sample loading.
Wide skin script fixed.
Fixed filter bitmap in TS404 interface.
Better (typing) kb mapping for testing (channel settings kb).

Updated LAME mp3 encoder to version 3.70
Fixed linking of envelope wheels to MIDI controller.
Improved SimSynth 2 renderer DLL.
New instrument patches by BSB.
Win2k compatibility: RichEdit crash fixed, selector display fixed.
Fixed fine tuning not saved in FLP's.
Fixed recorded sample saving.
Fixed big samples always set as keep on disk samples.
Fixed old bug in playlist.
Fixed bug in sampler envelopes.
New SimSynth 2.7 patches! (/SS2_Extra/2.7)
New humanize presets.

2.5.0 (13/04/00)   **Full envelopes & LFO (pan, vol, filter & pitch)!**
New *.FST 'channel state' files (instruments - replaces *.404 files).
New design for the TS404 (also added triangle LFO shape).
Tempo is now sample-accurate (useful when you render a lot of bars).
Channel settings window redesigned.
Partial import of ReBirth 338 song files.
New impressive reverb plugin by Ultrafunk.
Fixed bug in rendering of TS404 (distortion).
Fixed bugs in ZIP export.
Minor bugfix in changing PPQ.
Timing is all new inside & more accurate.
Rendering changed & bugfixed (tempo changes).
DirectX filters support updated.
Added 'live loop'.
Autostretch follows tempo changes.
Old crap trashed out: mix feature (graph edit) & vol/pan/pitch/mix wheels.
FX in the graph edit reordered.
Fixed small problem in level ramping.
Echo delay now linked to the channel.
Added presets to event editor LFO (speed wheel popup).
Now TS404 sustain max = infinite.
User skins will have to be slightly adjusted to work with this release.
Minor bugfix in pattern editor.
Fixed rare click problem with resonant filter.
Fixed crash when setting tool launched at startup with channel sample.
Added sinc interpolation (very slow - rendering only) because cubic is sometimes noisy.
Now 1000 bars in playlist.
Rearranged plugins list (too many on screen) + favorites.
Background process for long renderings.
Added keep on disk samples.
Added option not to resample waves (better for looped stuff).
Added support for pyramid panning shape (circular is good but can generate clipping).
Added 'keep notes continuous' tool (handy for TS404 without gate).
Fixed rare crash with channel settings form & channel cloning.
Added handy 'clone pattern' macro (tools).
Mapped key aftertouch into controller 254.
Pitch bend now supported.
Removed click removal option (always on).
Filter now automated.
Graph edit now allows offset of the filter.
Added precalc DC offset removal.
Now renders playlist selection, if any.
Can now re-read the sample browser without collapsing everything.
Improved beat slicing (merging, shifting all the notes, checking for 'groups').

2.1.1 (19/01/00)   **Now using the LAME MP3 encoder for the best quality!**
Tempo changes now recorded too (with some limitations).
Added LFO tool in event editor.
Can now slice up beats thx to the BeatSlicer engine.

Fixed minor visual bug in event editor.
More space around wheels (TS404 & VST plugins) not to miss them anymore.
Pattern autoscroll now optionnal.
Event editor enhanced.
Random tool now affects notes & slides for TS404 channels.
Fixed bug with the piano kb & TS404 user shapes.
Fixed something with TS404 & patterns.
Fixed bug with channel mix/random.
Fixed click bug in fake surround effect.
Fixed bug in VST plugins handling.
Fixed note range in TS404 (some notes were clipped).
Prevents nasty slow FPU denormalization also in TS404 delay line & volume ramping.
Redesigned humanize box.
Removed 'update on each n ticks' option (I had to).
Better distortion on the TS404 when rendering (too slow).
Changed limitations of demo version.
Added about box to Fruity plugins.
Added 'Fruity center' plugin.
Switched default ticks per beat (PPQ) to 96.
Switched most time values (shift, delay) to a 192PPQ accuracy.
Mapped pitch bend into controller 255 for remote controlling.
Main cutoff now ramped.
Fixed small bug in window arrangement.
Fixed slave sync bug.
Fixed small bug in wav looping.
Improved support for DirectX filters.

2.0.1 (21/11/99)	Problem with background wallpaper covering some windows fixed. Also redraws smoother.

Crash with default skin in palettized mode fixed.
Scrollbars can be moved another way (right click).
Support for middle mouse button (to reset wheels & scroll windows).
Added FLP file format description (beta).
Added plugin editors in view menu.
Added 'arrange windows' in view menu.
Removed the 'auto arrange windows' option in settings.
Removed 'insert pattern in playlist' (not useful).
Internal sync has changed a lot & visuals are smoother.
Can now drop sound files on the playlist (very quick for effects on a song).
No more flicker on some controls.
Basic MIDI input added (see ReadMe.doc).
Added record button, mainly for keyboard input for now.
Autoscroll patterns when playing.
Added new tips, read them!
Can now move channels up/down.
Main reso filter now applied after the master plugins (better).
Can now render to 32Bit float wavs (for use in CoolEdit Pro).
Song settings separated from environment settings (more logical).
Right click a FX track button to pop up the list of plugins.
New default basic drumkit (Club basic).
No more pattern & playlist clipboards filled at the same time to avoid mistakes.
Added 'captionnizing' to event editor.
Now supports DirectX plugins (crashes to be expected:).
Added 'Twice slower' in the tempo menu, for easier recordings.
Added pan wheels to the main window.
Scans VST plugs in both user & Fruity directories.
TS404 LFO now adjusted correctly when changing song position.
Added balance custom plugin.
Added FruityPro /Reset to make a config reset in case you're in trouble.
Put the check for another instance back (this time only when there's a command line param)
(hope crashes won't be reported this time).
Added 'Open with FruityLoops' in popup menu associated with FLP files.
Fixed small bug in my use of the TS404.

TS404 rewritten internally, using floats, no more clipping & more stable filter. Even slightly faster. User shape is back.
Adjusted range of the filter in the TS404.
Adjusted the range of all the reso filters.
Rearranged main sliders.
Fixed glitch in cubic interpolation.
Skins now in /Skins subdir. No need to move your old ones, they're not compatible anyway.
Main, channel & delay line pan/volume tweakings interpolated to avoid pops.
Channel volume can now be tweaked on the fly (needed for the live recording).
MIDI remote controlling of most controls!
Removed 'ahead duration' mixer setting & added polling & hardware buffer settings for down to a 5ms latency on a SB Live!
Finished new playlist look! (still same features for now)
FX tracks redesigned, now up to 8 tracks available.
Live recording!
Integrated event editor!
Option for more realistic logarithmic levels (song settings).

1.7.6 (bugfixes!)	3 small visual bugfixes. Prob with SimSynth note fixed. Prob when mixing 2 TS404 fixed. Prob with dots window fixed. Prob with saving of wav files fixed. Bugfix in scope. Bugfix in the disk renderer. Internal sync small bugfix. Replaced SHIFT by G to pop up the graph edit (I had to free SHIFT for shortcuts). Some shortcuts changed/added (SHIFT instead of ALT for shifting left/right, shortcut for Save as...). Now renders Acidized wav files. Added clone option to the channel pop up too. Added cool (but slow) light show (not totally finished). **Added export to MP3 thx to BladeEnc.** **Can now load SimSynth 2 presets thx to David Billen.** Extended params for SimSynth 2 presets (riff, tempo). Installer now adds shortcut icon & stuff. Keyboard autoscroll when notes are out of range (autocentering would not be a good idea). Added 'auto zip empty channels' (general settings) for those who prefer to work this way. Problem with last opened projects menu fixed. Adjustable fade out (when cut) for better strings. Added note fine tuning for samples which don't match. Added 'Go to next empty pattern' tool. Added 'Select unused channels' tool (to delete them to clean up your song). Added useful 'insert & remove pattern' tools. No more preview on right click in the sample browser (was annoying). Plugin wheels now have a default value. More minor enhancements. Added ping pong delay. Added favorites to more dialogs (useful when exporting to wave file). Fine tuning is read from WAV files (middle note isn't - too many C4 by default where it should be C5). Added 'Hermite curve' interpolation (even better than linear) on stretching for sample loading & rendering (too slow for realtime). Improved sample locating (as Sam wanted). Main volume can be raised to 125%. VST plugins which have their own editor no longer have built-in wheels. Many are badly written & some crash because of this... FX3 is now interpolated (much less noisy). Middle mouse button used to reset wheels.
1.6.5 (20/06/99)	**Added support for SimSynth files.** Can also set the middle note of SimSynth files.

Added 4 effect tracks (+master) supporting up to 4 plugins each.
Now support all plugins type.
Plugin stuff saved inside the FLP.
Now eats less Windows graphic resources.
Note deletion (right click) bugfix.
Prob with background picture fixed.
Probs with Win98 fixed: the RTF format has slightly changed in Win98 & caused crash problems!
'Reload sample' bugfix.
More checks for 'bad' wavs (there are).
Some more minor bugfixes.
Can now drop TS404 presets to create TS404 channels.
Inverted the shuffle slider (more logical).
Basic pack now included in the install package.
Added 'shift delay' to the graph edit.
Added graph edit presets in the sample browser (text files to edit manually for now).

1.5.23 (3/05/99)   Changed stuff in the main menu.
Minor visual bugfix.
Ping pong loop available even when not looped.
Added stuff in the channel settings sample menu.
Added the recording box.
Removed the check for another instance (crash reports).
Added the TS404 beta!
New cool splash screen.
Added background tiled bitmap.
Added cool 'shade' scope mode.
No more temp directory (uses the windows\temp instead).
Added zip/unzip support for samples & FLP in one single ZIP package.
Support for more extra sample directories. Also try to locate missing samples in these dirs.
Added clone channel option.
Added true delay line for the TS404.
Remove mute checkbox in the channel settings (not useful).
TS404 presets in the sample browser.
Can now act as master clock for sync! (read the ReadMe.doc file for limitations). Sends start / stop / clock / SPP. Should also follow tempo changes. Added sync delay too.
Removed the channel settings unuseful pan & vol menus.
Use of devices cleaned a bit. MIDI not opened if disabled. DirectSound not opened if disabled.
Changed the mixer engine from 32bit int to 32bit floats. Shouldn't alter the sound in any way. Even faster (maybe unless you've got an AMD processor).
Removed support for WinAMP DSP plugins (they're all shit).
Playlist now starts from 1 instead of 0 (nicer).
VST plugins support beta.
Channel settings form shown unactivated to avoid mistakes.

1.4.3 (13/03/99)   Minor bugfix in loop files from sample browser.
Rendering & click removal bugfix.

1.4.2 (9/03/99)   Default values for all sliders (right click).
Max tempo raised to 999 (don't tell me you need more).
Added cut/copy/paste in the playlist.
Added pattern naming (right click the top row in the playlist).
Removed the loop selection & replaced it by looping the cut/copy selection.
Looped strings (using loop points defined inside the WAV file).
Better 'stop at screen bottom' (takes care of the task bar).
Added handy 'Always full height' option.
Added translation (for DSC) (french & nederlands).
Tips made external (translation).
Removed unuseful 'Export loop to clipboard' (now exports according to the loop state).
Now looks a bit better under weird Windows color schemes.
Autostretch now up to 512 (but not compatible with old versions of FL).
Auto detects email in URL box.

Nasty click removal (have a low bass cutting itself to see the difference).
Added FastTracker 2 XI instruments support (import only).
DS & XI files now in sample browser too.
Wide skin now for reg. only :(
Alt+click on knobs for quick note off (for strings) (just set volume to zero).
Changed the wheels to flat wheels in the default skin.

1.4.0 (16/12/98)   Last rendered wav path bug corrected.
Added stereo & 'flower' scope (right click the scope).
Small bug in the piano keyboard corrected.
Linked windows (sample list window, piano window) move smoother.
Little anim on the sample browser.
Bugfix in autostretch & ending silence trimming (sorry for incompatibilities).
Added precalc reverb.
Added loops in the sample browser.
Bugfix in the loop info stuff (!@#! RichEdit control).
'crash on exit' bugfix.
Scope crash bugfix.
Dynamic sample browser (faster).
Another bugfix again (when loading old loops).
MultiPlugin crash bugfix (but still a prob here).
DrumSynth DS files support.
Added tools to the 'sample scope' popup menu (so you can edit DS files directly with DrumSynth).
Added 'repeat block length' (just visual).
ALT+click on a wheel to reset it.
Zipped channels bugfix.
Added 256 colors warning message.
Added some tips.
Finally up to 64 notes per pattern.
Patterns take less memory (but who cares).
Added 'Fill each x notes' to channel menu.
The prog now takes a bit less graphic resources (but still too much).

1.3.8 (27/10/98)   Added quick 'Load sample...' in the channel context menu.
Added a small starting 4 channels kit in the package.
Added auto-scroll to the selected channel (arrow keys).
Main window never goes below screen bottom.
Math copro related bugfix.
Drag/drop small bugfix.
Added background wallpaper (for those who don't like to have the desktop behind).
Loop selection in the playlist (right click+drag down).
More hints on the wheels (numeric value).
Faster stretching.
Added linear interpolation to realtime stretching (optional).
Added interpolation to imported wave files under 44Khz.
Output scope has a faster response.
Added 'Big Scope' skin.
Saves *.nfo file on rendering (for FruityTracks/DMM).
Added quick 'copy whole pattern'.
Added drumkits.
More compatibility with compressed wav formats (ADPCM & mu-LAW can now be loaded using the installed ACM codecs several times).
Save modified sample (right click the scope in the channel settings).
Can now render to mono.
Finally added pattern length (set globally).
Added integrated FastWAV-like sample browser (CTRL+B).
Changed the ugly Windows scrollbar.

1.3.72 (01/09/98)   Checks for another instance & asks to have it closed.
MIDI tempo now updated when synchronized.
Another (old) MIDI related bug corrected.

1.3.67 (28/08/98)	Bug in the MIDI rendering/export corrected.
1.3.66 (26/08/98)	Avoid old ComCtl32.DLL bug by loading bullets & slider knobs externally.
	Added 'shift delay' trick so that 32nd notes can be achieved (using another channel).
FruityLoops Pro	Stretching now in realtime.
1.3.56 (01/08/98)	Pitch for each dot added.
	Added bottom status/resize bar.
	Edit mode buttons added (Pan/vol & Keyboard modes).
	Main pitch slider added.
	Old way to set dot volume removed.
	Added channel selection.
	Added piano keyboard.
	Added graph edit.
	Humanize on pitch & mix.
	Script to customize the skin (colors, holes & positions).
	CTRL+left click on any set button for a quick preview of the sample.
	Added a BW skin that looks good & works almost well with palettized systems.
	CTRL to transpose (keyboard mode).
	Dots window added.
	Shows CPU usage (sample settings).
	Replaced the old echo by a useful one.
	Inverted the pattern numpad to match the keyboard one.
	Preview in wave open dialog.
	The selected channel gets the sample directly from FastWAV (double click).
	PlayList window can now be resized. Also the /* keys change the playing pattern.
	Dot pan, dot note, mix effect & random now work with MIDI too.
	Corrected bug in the precalc resonant filter.
	New playlist that allows multiple patterns at the same time.
	Stereo delay & phaser effect added.
	Wider range for the delay volume wheel.
	Auto trim silence at the end of samples not to have to mix it (faster).
	Realtime resonant filter added.
	Starting sound.
	Various bugs corrected.
1.2.13 (not released)	Attack added.
	Favorites in wave open dialog.
	MIDI bank selection stuff corrected.
	Added MIDI controller settings.
	Auto-close FastWAV.
1.2.12 (01/06/98)	Bug that caused the echo to cut the sample itself corrected.
	Added Ins/Del buttons in playlist. Also right clicking on the left part selects the pattern too.
	Bug with the 6 numeric key sending minus corrected.
	Added preamp & decay precalc effects.
	Sample settings window rearranged.
	MP3 decoding added then removed (see below)...
1.2.11 (20/05/98)	WinAMP DSP plugins support (registered only).
	Unregistered version now limited to 4 channels.
	Humanize now in percents.
	Panning for each dot.
	New way of setting dot pan & vol (SHIFT).
	Humanize pan too.
1.2.10 (02/05/98)	Will loop the existing patterns if playlist empty instead of playing the first one.
	Right clicking a channel mute button for 'solo'.
	Loop comments are now in Rich Text format (RTF).
	Warning message when no output driver selected.
	Minor bugs corrected. Should be more stable. I hope.

Close DirectSound when loosing focus so most wave editors can run.
Added preview in the settings form.
Stretching to fit the pattern. Precalculated & rather slow.
CTRL key to adjust the volume of a whole line.
Note window has merged with the channel settings form.
More accurate wheel movement (right click).
Samples now support panning.

1.2.9 (19/04/98) Minor bug on the small volume wheel corrected.
Tried to 'attach' FastWAV to the main window.
Main window position saved & restored.
Keyboard keys to mute channels.
Scope mute button bitmap now loaded (skins).
Corrected another bug that made samples not to be found sometimes.
Added tips of the day. Hope they will be read :)

1.2.8 (15/04/98) Can now drop FLP files on the main window.
Bugs corrected in the saving of FLP files.
Humanize added.
Sync to input bug corrected.
MIDI/Samples menu option added.
Settings box shown when no output selected.

1.2.7 Channels volume/mute & main volume/shuffle now in the main window.
Loop settings menu removed.

(previous versions were MIDI only beta releases)

(gol 98-05)