ALESIS FUSION
SOFTWARE RELEASE NOTES

Version: 1.24
Date: 11/13/06

Sound ROM:
1. .

New Features/Changes:
1. .

Bug fixes:
1. Fixed bug where audio tracks did not synchronize properly with Synth tracks.

Version: 1.23
Date: 8/8/06

Sound ROM:
1. .

New Features/Changes:
1. Vast improvements to MIDI Sync.
2. Increased the tempo range by lower the minimum tempo to 30 BPM.
3. Improved response to MIDI Bank messages. It will now automatically respond to either Bank MSB or Bank LSB.
4. Locates, Rewind, and Fast-forward commands will send the following MIDI command sequence: STOP, LOCATE, and CONTINUE.
5. All Locates now send the Song Position messages via MIDI.
6. Song Position messages are now ignored while playing/recording.
7. Added an option in the Global mode (Settings-MIDI page) to listen to or ignore Song Select Messages. It will default to OFF.
8. Pressing [STOP] while a song is playing will now just stop the song and send a MIDI Stop message. Only pressing [STOP] while the song is not playing will send the All Notes Off message.

Bug fixes:
2. Fixed bug where importing a MIDI song would not correctly translate songs of different PPQN.
3. Fixed bug where programs would not always load properly when loading a song with General MIDI set to ON.
4. Fixed bug where GM drum would not always map correctly.
5. Fixed bug where ARP and EQ knobs would send random MIDI messages when LOCAL is set to off.
6. Fixed bug where played notes from the keyboard would shut off in Song Mode when song would end.
7. Fixed bug where copying and pasting insert effects in Program mode would only copy and paste insert 1.
8. Fixed bug where multiple MIDI Start, Stop, and Continue messages would be sent out in song mode.
9. Fixed bug where alternate range was not working properly with external MIDI input.

| **Version:** | 1.22 | **Sound ROM:** |
| **Date:** | 3/27/06 | |

1. Drum kits will no longer trigger the latched arpeggiator when pressing C1 (kick drum). Patterns are now triggered in areas of the keyboard without any drum sounds (at the extreme ends of the keyboard range).

New Features/Changes:
1. .

Bug fixes:
1. Fixed bug where storing a sample/song/program/multisample to a location at or above 256 would store to the wrong location and overwrite the item at that location.
2. Fixed bug where storing a song on top of itself with a new name would delete the audio files of that song.
3. Fixed bug where creating multiple samples and then storing them would result in samples being lost rather than stored.
4. Fixed bug where MIDI Note Off messages would not match MIDI Note On messages when the keyboard was transposed while keys where down. This would cause stuck notes to occur on MIDI applications.

| **Version:** | 1.21 | **Sound ROM:** |
| **Date:** | 2/09/06 | |

1. Added 10 new Groove mixes.
2. Added 6 new Split-Layer mixes.
3. Added 6 new programs. Two programs have been removed.
4. Added 16 new patterns.
5. Improved the playability of most Groove mixes.
6. Improved effects and EQ on most mixes.
7. Improved programs throughout all the banks.
8. Slightly re-ordered the mix and program banks.
9. Changed names of a few mixes.
10. Added sub-categories to Groove Mixes. The sub-categories describe the right-hand program.

New Features/Changes:
1. Added the ability to loop a song in Song mode. In Song:General page the user can enable song loop and set the song loop start and song loop end points.
2. Added the ability to create new Synth tracks while a song is playing/recording only if there are currently no audio tracks in the song.
3. Added the ability to start recording on key down if in record ready mode. To enter record ready mode, simply press [RECORD]. The Fusion will start recording upon pressing [PLAY] or pressing any key.
4. Added a re-initialize of the LCD that occurs every 5 seconds to refresh the screen if Electro-Static Discharge caused the LCD to blank out.
5. Item referencing is now case insensitive.

Bug fixes:
1. Fixed bug where system would lock up when loading a mix/program/song after loaded several mixes/programs/songs containing arp patterns.
2. Fixed bug where system would sometimes lock up after loading a multisample into Sampler mode.
3. Fixed bug where pressing [JumpDes] button in the Mod page when jumping to an envelope would lock up the system.
4. Fixed bug where "Out of Memory" error message would show and programs would improperly load after loading a large number of programs.
5. Fixed bug where deleting audio tracks from a song and then copying that song would sometimes delete audio data from the original song.
6. Fixed bug where Osc 3 and 4 were not selectable in Utility:Edit Multisample menu in

Program mode.

Version:	1.20	**Sound ROM:**
Date:	12/09/05	1. Improved Programs and Mixes throughout every bank.

New Features/Changes:
1. Insert effects can now be chained.
2. Sample algorithm programs now contain 4 oscillators.
3. Four new filter types: "RP Low Pass", "Vocal Formant 1", "Vocal Formant 2", and "Vocal Formant 3".
4. Control of envelope curve per stage.
5. A new parameter was added to synth oscillator: "Monophonic Sample Reset". When set, this will reset the sample when played legato in monophonic mode.
6. Two new process functions available in Sampler Mode: "Bit Quantize Region" and "Reverse Region".
7. Added the ability to Undo or Redo process functions in Sampler Mode.
8. Sample loop points can now be edited while a voice is playing.
9. Sampler Mode Process list has been rearranged for better access.
10. Increased polyphony for all algorithm types.
11. In mixer automation mode, all tracks set to auto arm will be armed.
12. Pattern Type is now also stored with the program/mix/song. When a program is loaded it will override the pattern types with its type. When a pattern is loaded it will set the type based on the pattern.
13. Added "Mono Low" and "Mono High" keyboard modes to Phrase Sequence arp. These are mono types that follow the lowest or highest played key.
14. Direct Selection buttons [A] –[8] now default to "enable/disable" while in Edit mode.
15. Store page will remember the previously selected bank on this page while storing a new created program/mix/sample/song.
16. Fusion now displays "Waiting For Input…" when [RECORD][PLAY] is pressed and record threshold has not yet been reached.
17. Added ability to copy a volume folder from the CF card to the HD and vice versa.

Bug fixes:
1. Fixed bug where mod shape smoothing was not working correctly when a knob modulated pitch.
2. Fixed bug where there was no portamento with polyphony = 1 and portamento legato enabled.
3. Fixed bug where old sample parameter values would be retained after sampling a new sound.
4. Fixed bug where phantom button presses would occasionally occur.
5. Fixed bug where LFO trigger settings would interact with envelope trigger settings.
6. Fixed bug where mods to filter would not function in FM programs when osc 1 is disabled.
7. Fixed bug where osc 2 followed osc 1's crossfade mod routes when osc 1 is disabled.
8. Fixed bug where noise was sometimes heard at the end of a recorded sample.
9. Fixed bug where Fusion would sometimes crash when entering the import track page.
10. Playing a sample region with the [PLAY] button in Sampler mode will now play the whole sample when the process type is Normalize and play from the current start to the sample end for Insert Silence and Paste types.
11. The display value of the frequency parameters in the Effects section have been corrected.

12. Fixed bug where Fusion would not detect filenames beginning with a period as being invalid filenames.
13. Fixed bug where edited icon would appear in Sampler Mode even if a multisample has not been changed.
14. Fixed bug where deleting a mod route would corrupt table assignments for the mod routes.
15. Fixed bug where Undo was not enabled for sync parameters while editing an LFO.
16. Fixed bug where the crop function in Song Mode was not working properly.
17. Fixed bug where Insert Silence process in Sampler Mode was not functioning correctly.
18. Fixed bug where samples could not be selected properly from within a drum program.
19. Fixed bug where Item Explorer would freeze or not work properly when moving a song, mix, or program.
20. Fixed bug where effect mod routings would become invalid once the effect type is changed. Changing the effect type will now disable any effect mod route routed to a parameter of the previous effect.
21. Fixed bug where automation snapshot was not occurring when a record count-in was used.
22. Fixed bug where dry volume setting was being carried over to Program mode from Mix mode.
23. Fixed bug where velocity offset could wrap when playing arp at maximum velocity.
24. Fixed bug where song selection abort was not working properly in Song Mode, sometimes causing "(SEng)" errors to sometimes appear.
25. Fixed bug where Arp segment 1 length was not being recalled properly when a program is loaded.
26. Fixed bug where edited icon would remain on if a pattern is edited and then the program is changed.
27. Fixed bug where "(SEng) Invalid Handle" would sometimes occur when storing a song with a newly added audio track.
28. Fixed bug where the "No Stored Multisample to compare" message would display as truncated.
29. Fixed bug where track loop functionality was not always working properly. Also fixed bug where track loop parameters would not always be restored to their saved value if set beyond the recorded length of the song.
30. Fixed bug where songs loaded with General MIDI set to On would not always properly load drumsets on MIDI channel 10 tracks.
31. Fixed bug where playing certain patterns would hang the unit with rapid playing of keys.

Version: 1.11
Date: 12/02/05

Sound ROM:
1. Improved Programs and Mixes throughout every bank.

New Features/Changes:
1. Increased frequency range of effects EQ bands.

Bug fixes:
1. None.

Version: 1.10
Date: 11/10/05

Sound ROM:
1. Added "PRESET 4" program bank with 128 new programs.
2. Added "MORE" program bank with 65 new programs.
3. Filled out "SYNTH DRUM" program bank by adding 110 new programs.
4. Divided mixes into two banks: "GROOVE MIX" (40 mixes) and "SPLIT-LAYER" (108 mixes), adding several new mixes.
5. Analog drum kits added within the "SPLIT-LAYER" mix bank.
6. Improvements to programs in "PRESET 1", "PRESET 2", "PRESET 3", and

"ELECTRONICA" program banks.

7. Several new patterns have been added.
8. Demo songs have been removed from the internal Sound ROM. These demo songs are available as a separate download.
9. Unused multisamples have been removed from the internal Sound ROM. These multisamples will be available to the public at a later date.

New Features/Changes:

1. Added a dry level parameter to each track. This is a post-send level used to configure the wet/dry mix for send effects. This is on the Track-Output page along with being on the Effects-Bus-Select page. It is also added as an effect mod route destination.
2. Moved the track enable parameter to the Track-General page for Song mode and Part-General page for Mix mode.
3. Improvements to Mono Aftertouch response of the keybed.
4. Revised/Improved all Chorus effects.
5. Improvements to the Rotary effects.
6. Added tap tempo button. Tap [ARP] button at least 4 times to set tempo.
7. Added the ability to import MIDI files to Song Mode. Also the ability to export a song to a MIDI file.
8. Added ability to export all audio tracks in Song mode.
9. Audio Track Import utility now only shows supported files when user is selecting the file to import for easier browsing.
10. When the "Optimize to Mono" parameter in Program Mode is disabled, the cursor will jump to the "pan" parameter for immediate access.
11. Pressing [RECORD] only will place the Fusion in a record-ready state. Pressing [PLAY] or receiving a MIDI START message will then enter record mode. This enables the Fusion to enter record as a MIDI slave.
12. MIDI START message is now sent when record count-in ends rather than immediately when [RECORD]-[PLAY] is pressed.
13. Added a new arpeggiator parameter: "Use Part Range". This provides the ability to set an arpeggiator to play part only within the part's range. This is useful for playing patterns for analog drum kits in Mix Mode.
14. Altered display format of error messages.

Bug fixes:

1. Fixed bug where pressing [STOP] in Mixer mode would revert the knob row to the top row rather than keeping it disabled. This caused the tempo to change when turning knob 4 in Mixer mode.
2. Fixed bug where pressing a key while the arpeggiator was playing a fill would keep the arpeggiator within the fill forever.
3. Fixed bug where entering Sampler Edit mode from another mode would crash the system when "Last Mode Only" load option was used.
4. Improved clipping indication for sample metering.
5. Fixed bug where sustaining notes would click during large program load.
6. Fixed bug where tables would not properly delete and remained in sound and when stored.
7. Improved flanger effect with negative feedback parameter.
8. Fixed bug where flanger would self-oscillate using certain parameter values.
9. Fixed bug where Program Mode would accept a program change message from a MIDI channel that was not the Global MIDI channel.
10. Fixed bug where pressing [STOP] would cause the edited icon to appear when MIDI In was receiving the Fusion's MIDI Out.
11. Fixed bug where Mod Wheel and assignable knobs would send duplicate values via MIDI.
12. Fixed bug where an illegal path was allowed to be created when creating a bank name.
13. Fixed bug where changing the global transpose parameter would leave a stuck note on the MIDI slave.
14. Fixed bug where sample loop points would not be set correctly after recording.

15. Fixed bug where count-in would show corrupt timecode when meter is above 34/4.
16. Fixed bug where inserting a second note in a new pattern when the ARP ON/OFF is on would freeze the unit.
17. Fixed bug where receiving MIDI clock would incorrectly determine the tempo once the sync message is received after a long absence.
18. Fixed bug where creating a song from a mix would not correctly set the insert effects for each part.
19. Fixed bug where patterns would not play/record correctly with meter other than 4/4.
20. Fusion no longer responds to MIDI CC for Balance. It will only respond to MIDI CC for Pan.
21. Fixed bug where pressing [STOP] during a record count-in would keep the timecode in the count-in display.
22. Fixed bug where effects mod routings would not always store correctly.
23. Improved the system to eliminate noise for non-looped samples pitched extremely high.
24. Removed clicking that was recorded to a sample when playing the keyboard while recording in Sampler mode.
25. Fixed bug where users were not able to edit and store the "Simple Drone" pattern.
26. Fixed bug where sampled audio would have a discontinuity in the audio after the first 64 samples.
27. Fixed bug where Undo was not working correctly while editing a mod route.
28. Fixed bug where notes would stay on when disabling the "keyboard" parameter of a part or selecting a mix where the part had its "keyboard" parameter set to off.
29. Fixed bug where moving a mod route would not properly move all of its parameters.
30. Fixed bug where "EDIT Env:" text was clipped with certain mod routings.
31. Fixed bug where editing a pattern would not always show the edited icon.
32. Fixed bug where deleting the Volume ID of a CF card would cause the Fusion to display a corrupted volume ID in the Media-Info page.
33. Fixed bug where soft buttons would incorrectly appear in the Item Manager.

Version: 1.05
Date: 10/17/05

Sound ROM:
1. Added 15 new arpeggiator patterns.
2. Added 5 new mixes to the Mix bank.
3. Improved piano envelopes
4. Added Aftertouch modulation to a few programs.

New Features/Changes:
1. None.

Bug fixes:
1. None.

Version: 1.03
Date: 10/11/05

Sound ROM:
1. Added "ELECTRONIC" program bank.
2. Added "SYNTH DRUM" program bank.
3. Improved levels in a few groove mixes.
4. Replaced "Oboe & Bassoon" mix with "Stringed Bassoon" mix.
5. Tune improvements to trombone multisamples.

New Features/Changes:
1. Pressing [LOCATE]+key in the Program mode Play screen will allow the user to adjust the Global Transpose parameter. This is also allowed in the Play screen for Mix, Song, and Sampler modes.
2. When editing a parameter, pressing [LOCATE]+key will select a value. The keybed

will scale the entire range of the parameter.
3. The selected knob row is remember per mode and is initialized to the "Arp" row except for Program mode which is initialized to the "Assign" row.
4. Pages named "Edit" have been renamed to "Settings".
5. Disabled the feature where the LCD was re-initialized every five seconds to deal with possible static discharge issues.
6. Additional support for manufacturing.

Bug fixes:
1. Fixed bug where the clipboard would not correctly paste effects parameters.
2. Fixed bug where editing events within a song would not set the song edited flag.
3. Fixed bug where arpeggiator modulations were not occurring when played via a song or via MIDI.
4. Fixed bug where patterns were not be reset at the start of the song.
5. Fixed bug where the graphical arrow in the FM "Router" page was obscured.
6. Improved response of the pitch wheel.
7. Fixed bug where the Fusion would ignore program files with uppercase extensions when building program banks.
8. Fixed bug where volume and pan controller changes in patterns were ignored when the pattern was loaded.
9. Fixed bug where the tempo LED was not in sync with the song.
10. Fixed bug where the edited flag would be displayed when loading the initial mix, program, or song when Global option for loading is set to "Last Mode Only".

Version: 1.02
Date: 10/03/05

Sound ROM:
1. Added several new mixes. The Mix bank is now complete. All mixes were improved and reordered. Added more groove mixes. Added MIDI Template mix.
2. Added GM program bank.
3. Improvements to programs (including improvements to the "Holy Grail Grand Piano"). Hammond organ programs now have authentic percussion response.
4. Improvements to the demo songs.

New Features/Changes:
1. Support for General MIDI. When General MIDI mode is enabled the user will be brought to the "MIDI Template" mix in Mix mode.
2. Improvements to triggering the arpeggiator patterns. Tempo LED will sync to arpeggiator based on the first trigger.
3. Revised the interface on the Global-MIDI page.
4. Added options to the Global-MIDI page to allow the user to enable/disable sending and receiving MIDI sequencing commands.
5. Improved default programs created when the user changes the synth type in Program mode.
6. The pattern length selected by the user is now stored within a pattern and recalled when selecting that pattern.
7. Track volumes, pans, and send levels now update when received via MIDI controller messages.
8. Added the ability to set the song length.
9. Added an option in the Global-Option page to load either programs for all modes on startup or only the programs in the current mode on startup.
10. When the "(Edit) [1]-[8]" option is set to "Enable/Disable" in the Global-Options page, the [BANK] buttons can now be used to select the next/previous bank of 8 tracks for enabling and disabling.
11. Improved polyphony performance for high pole filters.
12. Additional support for manufacturing.

Bug fixes:

1. Fixed bug where arpeggiations triggered in succession in mix mode would lose sync.
2. Fixed bug where programs would sometimes fail to load and produce an "Invalid File Format" error message.
3. Fixed bug where latching the arp with the sustain pedal would cause keys that were once played to no longer trigger.
4. Fixed bug where mod route amount would restore to being 0.01% less than what was stored for certain values.
5. Fixed bug where loading new patterns would reset the tempo to 120 BPM.
6. Fixed bug where system would not respond to the foot pedal function when received via MIDI or via song playback.
7. Fixed bug where MIDI note off was not always being sent when note off occurred during a program change.
8. Improved the display of running timecode under heavy mixer automation.
9. Fixed bug where main Song mode screen would incorrectly show which tracks were armed (with underline indicator) when song was playing.
10. Fixed bug where arpeggiators were not properly turning off when a new mix was selected.
11. Fixed bug where the tuning type parameter was not properly working in Program mode.
12. Fixed bug where LFO trigger settings were interacting with other LFOs.
13. Improved how the envelope overlap release parameter functions.
14. Improved monophonic programs when the same key is repeatedly pressed.
15. Improved the problem where slight clicking was heard when the polyphony limit was reached.
16. Fixed bug where the Fusion would not always respond correctly when receiving MIDI in running status form.
17. Fixed bug where deleting songs with audio tracks would produce an error message.
18. Added fade out to recorded sample to prevent clicks at sample end.
19. Fixed bug where table points became unselectable when the first two points were equal.
20. Fixed bug where the certain parts would sometimes be silent after startup until the [STOP] button is pressed (when the foot pedal function was set to "Mod + Volume").
21. Fixed bug where tables would not paste properly when using the Clipboard utility.
22. Fixed bug where effects parameter for ring modulator LFO rate would incorrectly wrap.
23. Fixed bug where Gated Reverse Reverb effect would clip.
24. Fixed bug where parameter overrides in mixes and songs would not always load properly when loading the mix or song.
25. Fixed bug where non-existing parts would sometimes be displayed in the Mix-Utility page.
26. Fixed bug where the category would not update properly with rapid changes in the Category mode.
27. Fixed bug where the system would lock up when zooming in completely on samples of certain lengths.
28. Fixed bug where parameter fields in the Song-Editor screens would reset when changing the start and end time parameters.
29. Fixed bug where recording patterns with quantization would not record notes when played as the pattern reloops.
30. Fixed bug where patterns would not switch between A and B variations correctly if the step was set to anything besides eighth note.
31. Fixed bug where mod routes would sometimes get corrupted when deleting or moving mod routes.
32. Fixed bug where mix mode would play added parts when in compare mode.
33. Fixed bug where HD error messages would be shown when leaving USB mode when the Fusion entered USB mode in Song mode with audio tracks armed.
34. Improved loading of mixes and songs.
35. Improved the Piano Roll and Event List editors.
36. Fixed bug where all LEDs would flash while loading programs when the mod wheel was set to just above the minimum or just below the maximum setting.

37. Fixed bug where assign row would sometimes be blank on the main Program or Mix screen rather than displaying its assignment.
38. Fixed bug where release velocity would not be properly pasted when copying/pasting event data in Song-Editor pages.
39. Fixed bug where display would not show the transposed note in drum algorithms. Also the LOCATE+Key would not adjust to the program transpose value.
40. Fixed bug where storing patterns or songs would sometimes corrupt memory, corrupt media, and/or crash the Fusion.
41. Fixed bug where inserting a corrupted compactFlash card would crash the Fusion.
42. Fixed bug where voice engine's sound memory usage was incorrectly displayed.
43. Fixed bug where effects mod routes would not reset its modulation effect when deleted or reassigned.
44. Added mod range display for envelope release decay and envelope time.
45. Fixed bug where notes in song would stop sustaining when changing the current edit track.
46. Fixed bug where undo function would not work properly across tracks in Song/Mix modes.
47. Fixed bug where portamento time was not displayed correctly in the mod page.
48. Fixed bug where the Overdrive Rotary would sometimes have its high rotor spin out of control.
49. Fixed bug where the Drum "Quantity Assign" keyboard mode could not be stored with the program.
50. Fixed bug where effect delay times were not correct.
51. Fixed bug where deleting an event from the pattern event editor would delete the piano roll's selected event instead.
52. No longer send All Notes Off, All Sound Off, All Controllers Off via MIDI on startup or when changing modes.
53. Fixed bug where controllers playing back from song would not modulate the effects.
54. Fixed bug where "Octave Assign" arpeggiator keyboard mode parameter was not properly working.
55. Fixed bug where arpeggiator keyboard modes other than "Mono" were not working properly in variations besides "A".
56. Fixed bug where UI locate points could not be selected when the "(Edit)[1]-[8]" Global option was set to "Enable/Disable".
57. Fixed bug where overwriting existing program name would load older program when saved.
58. Fixed bug where metronome would occasionally skip a beat.
59. Fixed bug where filter row settings would be retained through program change when the current know row was not set to the filter row.
60. Fixed bug where the system would not reset properly when changing the Voice Select function in Global mode.
61. Fixed bug where deleting a zone in Sampler mode would mute existing zones.
62. Fixed bug where programs would fail to load and show an error that a table could not be found.
63. Fixed bug where songs would not play through internal sounds when local was off.
64. Fixed bug where enable/disable would not always properly work when pressing 1-8 buttons.

Version: 1.01 **Sound ROM:**
Date: 8/11/05 1. No changes to the Sound ROM.

New Features/Changes:
1. Improved knob graphic resolution.
2. Sound banks will now update after HD or CF format.
3. Allow sustain pedal to latch arpeggiator if ARP is enabled.
4. Additional support for manufacturing.

Bug Fixes:
1. Improved graphic display response in Song mode.
2. Improved oversensitivity of aftertouch response at note on.
3. Fixed bug where voice engine would occasional fail to run on power up.
4. Fixed bug where switching the CF card would not be recognized through USB.
5. Fixed bug where storing drum programs to a new bank or device would cause referencing problems.

Version: 1.00
Date: 8/05/05

New features/Changes:
1. Initial Release.

Bug fixes:
1. .