AdrenaLinn (original model) Software Versions

There are 2 little computers inside the AdrenaLinn

1) A microcontroller (MCU). To check its software version, connect power while holding the UP ARROW button. The latest version is 1.5, shown in the display as "1-5".
2) A digital signal processor (DSP). To check its software version, connect power while holding the DOWN ARROW button. The current version is 1.6, shown in the display as "1-6".

The following is a list of the significant changes in each software version of each chip:

MCU

MCU 1-0: First release

MCU 1-1:
• Improved LED test on power-up

MCU 1-2:
• Fixed bug: When receiving MIDI clock and a tempo-based delay setting is in use, quiet clicks are heard. This was improved partially by adding input clock smoothing, but erratic clocks would still cause the clicks.

MCU 1-3:
• Fixed bug: When syncing to incoming MIDI clock and the MIDI input is disconnected, the AdrenaLinn would start playing by itself.
• New feature: The active drumbeat may be changing by incoming MIDI Song Select messages
• Fixed bug: If you play an intro (by holding the START foot switch) then stop it during the intro, starting it again only plays the intro.
• New feature: New Filter Mode option: OFF
• Fixed bug: On total initialization, global parameters are immediately written to PIC EE memory instead of waiting up to 10 seconds.
• Default Output Volume was changed from 40 to 50.

MCU 1-4:
• Fixed bug: If Bypass Mode = RES and BYPASS foot switch is pressed, Bypass light went on. (It shouldn't have.)
• Fixed bug: When receiving erratic MIDI clock and Delay parameter is set to any tempo-based setting, delay intermittently stopped.
• Fixed bug: When MIDI clock is received and MIDI Clock Source is set to either IN or I-O, the Hold Tempo function would be ignored.
• Default output volume changed to 60
* Fixed bug: When receiving MIDI clock and a tempo-based delay setting is in use,

quiet clicks are heard. This was partially fixed in v1.2, but much improved here by improving the smoothing of erratic MIDI clock, but also a fadedown in the DSP code in DSP v1.5.

MCU 1-5:
• Fixed bug: When syncing to Pro Tools (no MIDI Clock until started), AdrenaLinn would play out of sync unless Pro Tools was started, stopped then quickly restarted.

DSP

DSP 1-0: First release

DSP 1-1:
• Fixed bug: selecting different amp models, or new preset containing different amp models, sometimes sounds thin.
• Fixed bug: some steps of filter sequence sometimes play slightly late.

DSP 1-2:
• Fixed bug: For filter modes of FL1, FL2 and PIT, some distortion could occur at higher resonance settings, particularly if filter followed distortion. Filter input gain was reduced at higher resonance settings. The volume of flanger presets was raised to compensate for this gain reduction. Preset 69 was changed to envelope flanger following distortion, for talk-box effect.

DSP 1-3:
• New feature: DSP software may now be updated over MIDI. (Flash memory area containing DSP program was formerly blocked from writing.)
• Fixed bug: When pan was modulated quickly by LFO, a “fuzziness” was added to the signal. Pan modulation resolution is increased to correct this.
• New feature: New 7th Filter Mode option: OFF. (filter is bypassed.)
• Fixed bug: Some presets caused distortion because of DSP overload. Some presets were changed to use less processing power. (Preset 69, 79 and 80, and drumbeat 22)

DSP 1-4:
• Fixed bug: When DIR-AMP parameter was set to AMP, the DSP processor could be overloaded, causing distortion. The notch was removed, replaced by a reduction in amp model treble boost.
• Fixed bug: When the preset’s Pan parameter was set to DLY, unnecessary DSP processing was being performed

DSP 1-5:
• Fixed bug: To slightly reduce noise, some internal signal paths were changed from 16 bit to full 24 bit: Bypass, amp model’s flanger pass-through, post-distortion

lowpass, final amp model output.
* Fixed bug: Add sensing of DSP input bit to determine board rev and therefore switch de-emphasis in or out.
• Fixed bug: Clicks or pops could be heard when presets were changed.
• Fixed bug: When syncing to incoming MIDI clock and the Delay parameter is set to any tempo-based setting, occasional clicks could be heard, caused by erratic MIDI clock stopping the delay. This was corrected by fading down delay instead of immediately stopping it.
• Fixed bug: Eliminate distortion at high lowpass filter resonance settings of lowpass filter (even if CLIP light doesn't light) by reducing input level to filter as resonance is increased.
• Increased Bypass level (from internal setting of 40 from 50).
• In presets, reduced level of some presets to prevent internal digital overload.

DSP 1-6:
• Added automatic sensing of newer circuit board with phones in order to switch preemphasis on or off.
• Fixed bug: Quiet clicks could be heard on fast modulation transitions of the 2 and 4 pole lowpass filters. This was corrected by slightly slowing the fast transitions.
• Fixed bug: Sometimes the delay would become distorted then stop entirely.
• Fixed bug: When either the preset or drumbeat pan was set to one side, a small amount of the other side was still present. This was fixed.
• Fixed bug: The maximum delay output level was 65% of the dry signal. It is now 100%. The delay volume of presets was reduced to compensate.
• The post-distortion lowpass filter has been changed from 2 pole to 4 pole, reducing the fuzziness of the distortion.
• Amp models have been revised for gain equal to amp bypass when drive = 0, and for improved tone. Presets have been updated to equalize preset volumes.
• A highpass filter has been inserted into the audio envelope detection path, making the audio envelope more sensitive to high notes.
• Presets have been updated, primarily to improve the 1st 20 presets.