# AKAI EWI 4000s SOFTWARE HISTORY

**Version:** 2.4 **Date:** 11/4/08

# New features/Changes:

- 1. Added flute and oboe fingering.
- 2. Manufacturing support for components in new units. This requires a new format for the firmware file. PLEASE NOTE that once a unit is upgraded to version 2.4 it can then never be downgraded to previous versions.
- Implemented option for disabling sending external program change messages. The 'dP' menu has been replaced by a 'PC' menu. It has three subitems: 'dP', 'AL' and 'Et'. These subitems can be turned on or off by pressing the TRANS key.
  - 'dP': Enable Direct Program Change function (default on).
  - 'AL': When on, all playable notes can be assigned a Program number. When off, the octave of the note is indifferent (default off).
  - 'Et': Enable sending MIDI Program Change messages (default on).
- 4. Added more error checking and display. Now the EWI checks for correct block sizes and displays an error code if the size is incorrect. The firmware upgrade error display has been changed and extended too.

The error codes are as follows:

'E1': Bad block length

'E2': Missing block (blocks were received out of order)

'E3': Unexpected end of transmission

'E4': Bad checksum

## Bug fixes:

- 1. If the MIDI base channel was set to other than 0, an extra 0 byte was sent after a Program Change or Channel Aftertouch message.
- 2. Fixed a possible problem where very fast attack did not produce a note.
- 3. Implemented fix for erroneous receiving from certain MIDI interfaces. This issue may have been seen when patches were not being received correctly over MIDI causing corrupted patches and '88' to display on startup. This issue may have also been seen during firmware upgrades.

There is now a 'CP' menu after the 'UP' menu, which can be either 'on' or 'oF'. When ON, it activates an alternate receive mode, when OFF, it is in normal receive mode. If you are experiencing issues receiving MIDI, we suggest that you set this menu to ON.

Version: 2.3 Date: 12/15/06

# New features/Changes:

4. Added sax-like fingering mode.

## Bug fixes:

Version: 2.2 Date: 09/15/06

## New features/Changes:

1. During firmware upgrade check for copying error.

# Bug fixes:

1. Fixed "SysX data is missing" problem with UniQuest editor.

Version: 2.1 Date: 08/18/06

# New features/Changes:

1. Improved MIDI input buffer overflow handling.

# Bug fixes:

 Fixed bug where pitch bend in stepped mode did not reach upper limit

**Version:** 2.0 **Date:** 06/22/06

#### New features/Changes:

- 1. Send MIDI Panic when FX and LEVEL are simultaneously pressed.
- 2. Changed the way of exiting ADJUST mode Now when the EWI is is ADJUST mode, pressing SETUP will immediately quit ADJUST mode, without showing the menu.
- 3. Reset internal parameters automatically after each version change. Now it is not necessary to do a factory reset after upgrading the firmware
- 4. Re-added sending All Notes Off when SETUP is pressed.
- 5. Changed 'Po' menu item 'PE' to 'PS' (= Portamento Switch)
- 6. Transpose now does not send All Notes Off.
- 7. Increase output level in HOLD modes.
- 8. Set output level to the same as in v1.1 in audio test mode 't7'.

#### Bug fixes:

- 1. Fixed bug where the EWI sends spurious controller messages when ADJUST mode is exited.
- 2. Fixed key sensing issue with STRING formant filter
- 3. Eliminated audio click when FX/LEVEL is pressed while playing.
- 4. Fixed issue where unit may hang when changing program in HOLD mode.

## Version: 1.2 New features/Changes:

**Date**: 04/12/06

1. The internal synth should ignore Portamento Time when the controller is turned off.

- 2. Send All Notes Off when SETUP is pressed.
- 3. Reset Volume and Expression controllers when mapping is turned off.
- 4. Hold and Octave/Interval modes now are turned off when SETUP is pressed to avoid being stuck in harmony modes.
- 5. Implemented Glide strip CC.
- 6. Implemented large preset change table.
- 7. Remember last selected setup parameter. This behaviour must be explained in the manual, especially when one needs to turn on the Adjust mode. Formerly pressing SETUP would toggle the Adjust mode. Now one has to select the 'Ad' parameter to turn it on/off.
- 8. Changed HOLD/OCT CC UI. Now all the subparameters 'Cn' (controller number), 'dA' (data value), 'LA' (latching) can be accessed by pressing TRANS. While TRANS is held, you can select the subparameter using OCT/HOLD. When TRANS is released, you can set the selected subparameter. Now by pressing and holding TRANS you can select another subparameter. You can exit the subparameter setting mode by pressing SETUP. This will get you back to the 'CC' display.
- 9. [Issue 57] stop at #01 when scrolling through patches. Note: both up and down scrolling stops at #01.
- 10. Send Note On with velocity 0 instead of Note Off.
- 11. Send Legato controller (#68) right before the second Note On instead of before the first Note On.
- 12. Added the ability to wrap around Program Change numbers. Also reduced initial and key repeat delays.
- 13. Improved harmony mode switching. Now HOLD/OCT can be switched transparently while playing in all modes without losing notes.
- 14. Improved power consumption. Battery life should be twice as long now.
- 15. Improved sensor output smoothing.
- 16. Increased touch sensitivity range.
- 17. Added option for EVI fingering with reverse octave rollers. Now there are 3 fingering modes: 'EI' for EWI, 'Eu' for EVI with "normal" octave rollers, and 'Er' for EVI with "reversed" octave rollers.
- 18. Check MIDI Program Change range and ignore program numbers above 99. (Previously, receiving a Program Change greater than 99 would select a test tone).
- 19. Implemented HOLD sustain mode. This is the same as the 'LE' mode, except that it sends a 'Sustain' MIDI controller instead of 'Sostenuto'.
- 20. Reversed octave rollers back to EWI-style also in EVI fingering mode.
- 21. Implemented HOLD/OCT CC subparameter UI. The HOLD/OCT CC mode has three parameters: CC number, 'on' value and latching mode. These can be accessed as follows:
  - a. press and hold SETUP
  - b. select 'Ho' using HOLD/OCT
  - c. release SETUP -> enters Hold mode setting
  - d. select 'Cc' using HOLD/OCT
  - e. at this point press and hold TRANS (while holding TRANS

- the display shows the CC number) (NOTE: pressing SETUP instead would exit the menu)
- f. set controller number using HOLD/OCT
- g. if you release TRANS now, you get back to the 'Cc' menu item.
- h. while still holding TRANS press SETUP again to enter the CC subparameter setting
- i. while holding SETUP select between 'uA' for CC 'on' value or 'LC' for latching mode using HOLD/OCT (you can release TRANS now)
- j. release SETUP to enter CC subparameter setting when the appropriate subparameter is selected
- k. set subparameter using HOLD/OCT (value: 0..127, latching mode: on/off)
- I. press SETUP again to exit and return to normal mode
- 22. Hold now delays the Note Off and does not rely on the Sostenuto controller (although it is necessary to send it for correct playback of recorded MIDI performance).
- 23. Implemented non-legato hold and interval modes as requested.
- 24. MIDI playback has been improved considerably
- 25. Breath and Pitch bend smoothing has been vastly improved
- 26. Pitch bend sensor can be used as a continuous MIDI controller.
- 27. HOLD and OCT can be used as an on/off MIDI controller
- 28. Added user interface elements for selecting fingering scheme
- 29. Changed default parameters as requested

# Bug fixes:

- 1. Fixed bug where note number overflow was causing a malfunction.
- 2. Fixed bug where EWI locks up when program is changed after audio has been disconnected.
- 3. Fixed some transmission error problems related to the '88' bug
- 4. Fixed bug where receiving MIDI Program Change did not update the current program number.
- 5. Mute output during program change to avoid popping and clicks.
- 6. Ignore MIDI Program Change if the new number is the same as the currently selected one. This reduces clicks when multiple Program Changes are sent with the same program number.
- 7. Fixed bug where pitch bend up/down CC sent the wrong controller number.
- 8. Fixed bug where Bite, Glide and Bend were responding slowly.
- 9. Fixed bug where pitch bend was affecting the wrong voice. Pitch bend now affects both voices.
- 10. Fixed bug where breath sensor does not send multiple controllers.
- 11. To reduce confusion 'C' is now removed from the transpose list.
- 12. Fixed bug where Interval modes lose polyphony if one of the new notes the same as one of the old ones. The fix corrects the problems by not overlapping notes in harmony modes.
- 13. Fixed bug where VCF was not opening fully.
- 14. Set key repeat delay and repeat times uniform across the UI.
- 15. Swap the order of Note Ons of primary and secondary notes in Interval modes so that always the primary note is send at last. This fixes problems with playing in Interval mode on mono synths.
- 16. Default breath mapping is now Breath+Aftertouch+Velocity.
- 17. Fixed bug where extra pitch bend is sent when PBEND CC is

released.

- 18. Stop scrolling at preset #01 when OCT/HOLD is used for up/down.
- 19. Quick Program Change mode now uses the range C1..B7 and the default values start with C1 = preset #01.

**Version:** 1.1 **Date:** 02/09/06

# New features/Changes:

1. Changed test tone not to use VCF in order to avoid distorted output.

# Bug fixes:

- 1. Fixed the "no sound when turned on with Preset 20 selected" problem.
- 2. Fixed a possible crash bug in Chorus
- 3. Fixed noise VCF bug in double mode.
- 4. Fixed "the very first note played has wrong VCF cutoff setting" bug.

**Version:** 1.0 **Date:** 12/30/05

# New features/Changes:

1. Initial release.