

# Mobile I/O 3.0d11 Beta 11 - Public Beta

## Software Release Notes

This release of the Mobile I/O software includes all the bug fixes and improvements to MIOConsole and the Mobile I/O Driver that were included with the 2.0f08 package and adds many new features. While the MIOConsole improvements apply to all OS X users, the updated driver is only available for Mac OS 10.3 and Mac OS 10.4 users, and is required for Mac OS 10.4 users.

This is BETA software, and may not operate as intended or expected. It has known bugs and some features are not completely or correctly implemented. While Metric Halo will do everything possible to enable you to use this software to good effect, this software comes with no support commitment. If you encounter problems with this software, your only course of action is to submit a bug report to Metric Halo Support (see the enclosed BugReportTemplate). If possible, we will suggest a work around, but in many cases the only solution to a problem may be for Metric Halo to fix the bug that you have identified for a future release of the software.

The foregoing notwithstanding, the software contained in this package has received a substantial amount of testing and is expected to be quite stable. In other words: we expect it to work, but if it doesn't you've been warned that it might not.

Please see the "ReadMe\_Installing.pdf" document in the "Mobile I/O Software OS X" folder of the installer image for detailed instructions as to which software is applicable to your system and how to install it.

This public preview of v3.0d11 is a public beta release of the Mobile I/O software that contains the following additional features:

- The "Record Panel" - integrated multitrack recording software
  - Supports recording multiple channels from multiple boxes on all supported versions of MacOS (10.2-10.4).
  - NOTE: Record Format is SD2 for all sample rates
  - NOTE: Boxes MUST be synchronized to the same clock.
  - NOTE: Playback is only for files recorded in the record panel (Mono SD2 files in a folder).
  - NOTE: Playback and Record are independent and simultaneous.
- Initial control surface support for SAC2.2k and Mackie Control
  - NOTE: The control surface support is not complete and undocumented; we are still mapping many of the controllers and buttons to functions in the console.
- OpenGL enhancements
  - NOTE: There is a known bug that is actively being worked on that can cause the window to appear to freeze when you switch panes if OpenGL is enabled.
  - WORKAROUND: Pull down a menu or drag the window -- this will "unfreeze" the window.
  - NOTE: Enabling OpenGL may not actually accelerate operations in 10.2.YMMV.
- Many, many new +DSP plug-ins w/ initial Documentation

- NOTE: Some plugins have confusing parameterizations
- NOTE: Some plugins may distort audio on the box
- NOTE: Some plugins may not have obvious applicability (even though they are applicable).
- New release firmware that provides (1.5.08):
  - Clock improvements for ULN-2
  - Enabling of Mix bus 5 & 6 on ULN-2
  - Fixes the Single Sample input delay issue
  - This version fixes the caveats that appeared in the 1.5.06 firmware. You can use this version with all hardware with no compatibility concerns.

The Public Preview has also received a great deal of testing, but its features are not 100% complete and Metric Halo considers it to be beta quality software. If you only use the features that are present in the 2.0 release, you should see no performance differences, but we want to make it clear that there may be undocumented problems with this public preview release, and that support for the release is limited.

Please refer to the HTML documentation in the "+DSP Docs (alpha)" folder for additional information about the new (and old) signal processing plug-ins for +DSP.

See below for a list of the changes and improvements in this software relative to the v1.5d15 release.

### **CHANGES FOR 3.0d11 since 3.0d08**

1. Fixed crash due to input area of +DSP graph allowing clicks outside of active area.
2. FIXED: (MM) Random changes to digital pots when switching any of the input channel types.
3. CHANGED: Removed grid from background in Graph window. It slowed down redraws and didn't look that good.
4. (MN) Fixed bug introduced as part of an attempted workaround for the OpenGL freeze problem where the window would sometimes "shake" on screen when you switched panes.
5. FIXED (HH): Clicking link button for an input pair (in the Analog I/O pane) causes the input path type from the wrong channel to be linked to the second channel of the pair. This leads to strange problems with relative levels when the channels are linked if the channel pair is not 1+2.
6. FIXED (MM): Clicking link button for an input pair (in the Analog I/O pane) was not updating the pad state of the input path when setting the input type on the second channel.

## CHANGES FOR 3.0d08

1. Numerous interface tweaks
2. Fixed problems with buffer overruns in the EQ plug-in blocks that could lead to erratic behavior and lost audio in the +DSP graph.
3. Added a number of key commands for the +DSP graph:
  - 'f' will flip the selected block left to right (e.g. the inputs go on the output side and vice-versa)
  - 'r' will toggle the connection routing mode from orthogonal (the current setting) to point to point.
4. Fix for one source of the "Disk Too Slow"/"Couldn't Synchronize Audio to Midi" in Logic. This also fixes the problem with metering in the Console and recording at 96k, especially when using a hard drive on the same bus
5. Clip names in Plug-in Popup menu
6. Lots more +DSP plug-ins. See #2 for more info.
7. Initial documentation for all the +DSP plug-ins.
8. Support for OpenGL rendering in for the UI. You need to enable this in order to utilize it. To enable it, select "Preferences..." from the "MIOConsoleX" menu. Check the "Use OpenGL for rendering box". It should then take effect after you switch panes, but it will definitely be in effect if quit and restart.
  - a. Please note that there is a known bug that exists in this code. From time to time, the window will get "stuck" after switching between panes. I am still working on figuring out why this happens. However, until I do, it is really easy to work-around. Simply pull down a menu from the menu bar, or drag the window by a pixel -- this will "unstuck" it.
9. OPEN: As you can tell from the preferences window, Control surface support is on its way. This version is partially implemented; right now, all you get is that it works with the Mackie Control (or anything that emulates the Mackie Control), and the transport controls for the record panel are connected to the physical transport controls. If the record panel is visible, it will also update the timecode display on the control surface.
10. Key commands added to control the record panel transport.
11. OPEN: Digital glitching problems with the new plug-ins.
12. Added Support for Preferences Menu
  - a. Open GL support preference
  - b. Control Surface support preference
  - c. Added 3/21 b01
13. Fixed clipped names in Plug-in Popup menu
14. RP: Fixed Channel Enable buttons are unresponsive to clicks.
15. Fixed +DSP Graph not recalling layout of patches
16. Fixed crash on startup in Tiger.
17. Fixed LFO plug does not recall parameter correctly
18. Added: Plug-ins now have brushed metal background
  - a. OPEN: but resizable plugs have a visual bug
19. Made it so that global command keys are processed only if something else does not snarf the event; this allows you to use simple keys for global commands, but does not interfere with normal typing...

20. Added back links to the +DSP doc index for all +DSP doc pages
21. Fixed lack of cable update when flipping process blocks
22. Added DSP resource indicators to Graph
23. Began support for localization
24. Added key commands to switch between console panels
25. Added support to remember the visibility and position of the "Command Keys" window
26. Added support for the 8 channel knobs on Mackie control to support controlling input gains.
27. Added back channel support to communicate the relative gain for the vPot, and precise readout to the LCD on Mackie Control.
28. Added support to allow popup entries to be cancelled by the escape key (as well as command-period).
29. Added support to allow Mackie Control to control the faders of the mixer
30. Added back channel support to communicate the fader positions back to the mixer
31. Added support for the console to assert the current state onto the control surface
32. Tested SAC w/Mackie Control emulation (OK)
33. Changed Clocking on ULN-2 to improve imaging and mid-low reproduction (1.5.04)
34. Re-enabled Mix bus 5-6 on ULN-2 (1.5.05)
35. Did massive rewrite of DMA engine and mixer to correct 1 sample delay on Analog pairs (1.5.05)
  - a. This requires substantial beta testing to ensure that we have not added any new corner case problems in the signal routing and delay compensation.
  - b. 1.5.05 messed up the digital I/O on the ULN-2. This was fixed in 1.5.06 (see #36)
  - c. OPEN: 1.5.06 is not reliable at 96k on the 2882. Needs some optimization in the firmware.
36. Added support to track UI focus onto the control surface
37. Fixed a crashing bug due to an incorrect order of initialization causing the wrong box parameters to be loaded into the system state when multiple types of boxes are attached to the system
38. Fixed channel swap and single sample delay on ULN-2 from 1.5.05 (applied at 1.5.06).
39. Fixed volume offset on Cans volume on 2882 (introduced with the b 01 console).
40. Fixed stuck mix-matrix cross points
41. Added support to allow user to order boxes in the Console as desired.
  - a. Click-drag a tab lets you set where you want the tabs to appear in the list (drag the tab to the desired location)
  - b. Console automatically orders boxes as they were saved in a multi-box console state file when the user opens the file.
  - c. Console remembers the last position a box appeared in the console and attempts to return that box to the same position when the box is rediscovered. This means that for most users, the boxes will always appear in the same order, once the desired order is set. If the user has multiple boxes and routinely only uses one at a time, but occasionally uses multiple boxes at once, then the console will not generally remember the order that was set the last time all the boxes were used together; In this case, the

user should reorder the boxes manually, or recall a saved console state (by opening a console state file) to reset the order as desired.

- d. Changed Record engine to properly track user tab order when connecting I/O to the boxes.
  - e. OPEN: Record panel UI tracks changes to the box order, but the record engine does not; so if the user changes the order of the boxes while the record engine is running, the channel names will be updated but the overviews will not – this is very confusing.
  - f. WORKAROUND: Don't change the box order while the record engine is running.
42. Fixed Garbage Characters in popup menus by converting the source menus to NIB based menu resources. Partial Japanese localization done.
  43. Changed Window menu to use NIB resource. Localization to Japanese done.
    - a. OPEN: Dynamic Menu items are still 'STR ' resource based. As a result, those menu items are not localizable yet.
    - b. TODO: Move dynamic strings to strings file so that they can be localized with rest of code.
  44. Added support to allow sub-panes of MIO Console Window to be resized and zoomed
    - a. Supports live resize
    - b. Supports unified zoom update
    - c. When a resizable pane is selected, the resize box in the lower right hand corner will be visible (if OpenGL is not enabled). If GL is enabled, the resize box is not shown, but the lower left corner is still active for resizing.
    - d. When a resizable pane is selected, the zoom gadget in the title bar of the window is activated (turns from light grey to green).
  45. Added resize support for the Record panel (with retained size preferences)
    - a. TODO: Add resize constraints so that user can't make panel so small that UI does not fit properly.
  46. Added resize support for the +DSP panel (with retained size preferences)
    - a. TODO: Add resize constraints so that user can't make panel so small that UI does not fit properly.
  47. Removed Anachronistic/unused widgets from record panel
  48. Added "Recording" menu:
    - a. Moved "Set Record Folder" command to the menu
    - b. Moved "Set Playback Folder" command to the menu
  49. Added help tags for menu items and Preferences window.
  50. Changed RP engine feedback meters (CPU, Record Buffers, Play Buffers) to have a peak-hold behavior, with click to reset.
  51. Changed the auto generated naming scheme to <tn>-<cn>.sd2, where <tn> is the track number, and <cn> is the user-specified track name. The track number is placed first so that the tracks are ordered properly on playback.
  52. Fixed bug where new console would crash if you read a multi-box console document that had a MIO listed that was not attached to the computer. Certain channel related data in system model was not being synthesized for the OFFLINE box and that data is now required by the UI for configuring channel controls, etc.

- 53. Built driver 1.5.d53 with all 2.0 improvements but maintaining mono streams
- 54. Fixed bug in linking which made MIOConsole unable to launch on 10.2.8
- 55. Fixed appearance bug related to fonts on 10.2.8
- 56. Fixed bug where record pane could crash when updating appearance.
- 57. Fixed drawing bug in record pane that shortened some lines improperly.
- 58. Fixed problem with moving tabs from right to left
- 59. Integrated correct Japanese localization for menus
- 60. Fixed messed up encoding of characters in clock source menu
- 61. Added JP Localization with translated help tags

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Contacting Metric Halo

If you need to contact us:

Metric Halo

5 Donovan Dr.

Hopewell Junction, NY 12533

[support@mhlab.com](mailto:support@mhlab.com)

Please send bug reports to:

[support@mhlab.com](mailto:support@mhlab.com)

[bj@mhlab.com](mailto:bj@mhlab.com)

Subject: MIOBUGX+DSP

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