

SOFTWARE RELEASE NOTES



Product: Mbox Extreme® Media Server

Manufacturer: PRG

Subject: Software Version 3.4

Bulletin No: MBX-009

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INTRODUCTION

Mbox Extreme Software Version 3.4

Software version 3.4 is now available for the Mbox Extreme Media Server.

Overview

Mbox Extreme v3.4 software contains several new features, enhancements, and bug fixes. An explanation of all new items can be found below.

New 3.4 Features and Enhancements

- + **Operating System** - All servers are now running Snow Leopard® OS X 10.6.7. (Refer to "[Snow Leopard and Force Desktop Mode Checkbox](#)" on page 2.)
- + **Force Desktop Mode Checkbox** - A Force Desktop Mode checkbox has been added to the Setup tab, providing the ability to force the desktop resolution when Mbox Extreme leaves Fullscreen mode. (Refer to "[Snow Leopard and Force Desktop Mode Checkbox](#)" on page 2.)
- + **Playmodes** - Changes have been made to the Kiosk non-looping playmode and new "Playout" modes have been added. (Refer to "[Playmodes](#)" on page 2.)
- + **Object Effects** - A new Texture Flip effect has been added. (Refer to "[Object Effects](#)" on page 3.)
- + **Shutter Damping** - Motion damping has been added to the shutter blade feature. (Refer to "[Shutter Damping](#)" on page 3.)
- + **Enhanced Alignment Rectangles** - It is now possible to have 9 groups of alignment rectangles (instead of 4). (Refer to "[Alignment Rectangles](#)" on page 3.)
- + **Support for Multichannel Audio** - Discrete audio (multichannel) support has been added. (Refer to "[Discrete Audio Support for Multichannel Audio](#)" on page 4.)
- + **Remote 2 Application** - The Remote application was rewritten as Remote 2 to provide more flexibility in server feedback display, to accommodate different output modes, and to improve reliability. Note that Remote 2 still requires the Mbox Daemon as an intermediary for communication. (Refer to the Mbox Extreme v3.4 User Manual for more information about the Remote 2 application.)

Corrected Issues

Bug fix highlights since v3.3:

- + Fixed AIFF audio performance issues.
- + Fixes for layer sync.
- + Fixed crash when adding layers via Remote 2.
- + Added support for layer sync in moviemode and main thread playback.
- + Fix for QuickTime files with tracks longer than the movie duration.
- + Restored ability to open and display RTF files.
- + Fix for Z fighting with Object Dissolve transition.

NEW 3.4 FEATURES

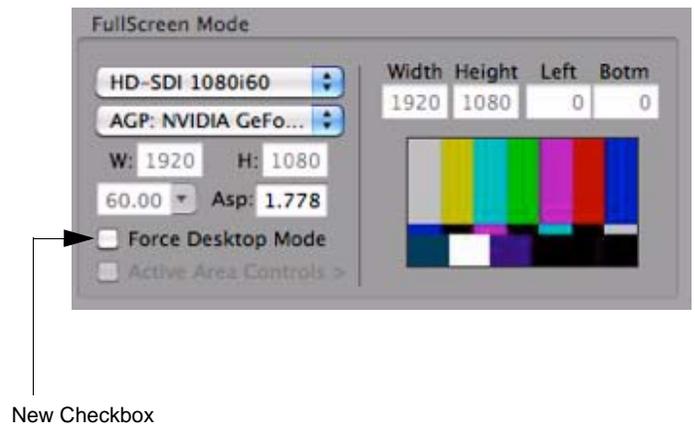
Snow Leopard and Force Desktop Mode Checkbox

All servers worldwide will now use the Snow Leopard® operating system. There is no difference to the operation of the Mbox Extreme software due to this, but some minor interactions with the OS have changed; notably the desktop frequency settings. The EDID from the Mbox Extreme I/O module provides EDID with accuracy to two decimal places (e.g., 59.94Hz). The Leopard OS rounded these frequencies to one decimal place - 59.9Hz. The Snow Leopard OS rounds these frequencies to no decimal places - 60Hz. Functionally, Mbox Extreme is still able to request and receive the correct frequency when entering Fullscreen mode, but it is difficult and confusing to set the desktop to the same frequency.

The Displays preference pane will no longer show the unrounded frequencies as an option. However the Displays drop-down in the menu bar will show frequencies with one decimal place (e.g., 59.9Hz) and therefore this should be used for accurate selection.

Additionally, Mbox Extreme now has the ability to force the desktop resolution when it leaves Fullscreen mode. There is a new "Force Desktop Mode" checkbox on the Setup tab. Enabling this preference will cause the Fullscreen mode resolution and frequency to be applied to the desktop when Mbox Extreme enters Window mode or quits.

Once the desktop resolution has been set, the OS will remember the setting. The Force Desktop preference is mainly to provide an easy way to get the desktop to the same resolution. By default it is off (unchecked).



New Checkbox

Playmodes

Changes have been made to the Kiosk non-looping playmode and new "Playout" modes have been added. The Playout modes are intended to be used on bump buttons like the Restart mode.

- + **180** - Kiosk Mode non-looping, pause on last frame of last file - this is the same as the range of 180-184 in Mbox Extreme v3.3.
- + **181** - Kiosk Mode non-looping, loop last file - this mode will loop the last file in the folder using the layer's currently selected crossfade type and time.
- + **182** - Kiosk Mode non-looping, fade out last file - this mode will fade the last file to transparent using the layer's current crossfade time.
- + **240** - Playout Mode, last 5 seconds - playback position will skip ahead to five seconds from the end of the movie.
- + **241** - Playout Mode, last 10 seconds - playback position will skip ahead to ten seconds from the end of the movie.
- + **242** - Playout Mode, last 15 seconds - playback position will skip ahead to fifteen seconds from the end of the movie.
- + **243** - Playout Mode, last 20 seconds - playback position will skip ahead to twenty seconds from the end of the movie.
- + **244** - Playout Mode, last 30 seconds - playback position will skip ahead to thirty seconds from the end of the movie.

Object Effects

One new object effect has been added:

- + **15** - Texture Flip - Used to invert the drawing axes (X,Y,Z) when applying a texture to an object. Useful for low-impact mirroring effects.

Mod A -

- 0 - 31 = flip X
- 32 - 63 = no flip
- 64 - 95 = flip X, Y
- 96 - 127 = flip Y
- 128 - 159 = flip X, Z
- 160 - 191 = flip Z
- 192 - 223 = flip X, Y, Z
- 224 - 255 = flip Y, Z

Mod B - n/a

Shutter Damping

The unused Blur channel on the Camera fixture has been replaced with a Shutter Damping channel. Currently, this parameter cannot be placed on the Shutter fixture without greatly affecting the DMX footprint of the server. As soon as possible, this will be rectified.

Like Object Effects 13 and 14, which apply motion damping to movement on a layer, the Shutter Damping works in 1/30th of a second increments. Therefore, a timed shutter move of 1 second (console xfade time) will take an addition one second if the shutter damping channel is set to a value of 30.

By default shutter damping is enabled.

Alignment Rectangles

It is now possible to have 9 groups of alignment rectangles. (Prior versions of Mbox Extreme software only allowed 4 groups.) Rectangles can be assigned to these new groups using the Remote 2 application. The Alignment Rectangle editor application has also been updated to reflect this change.

There are new values for the Camera fixture control channel to allow display of all the groups on the screen. For now, the old values (90 - 99) are also still active. The new Camera control channel values are as follows:

- | | |
|---|--|
| + 120 - All rectangles without X & O | + 130 - All rectangles with X & O |
| + 121 - Group 1 rectangles without X & O | + 131 - Group 1 rectangles with X & O |
| + 122 - Group 2 rectangles without X & O | + 132 - Group 2 rectangles with X & O |
| + 123 - Group 3 rectangles without X & O | + 133 - Group 3 rectangles with X & O |
| + 124 - Group 4 rectangles without X & O | + 134 - Group 4 rectangles with X & O |
| + 125 - Group 5 rectangles without X & O | + 135 - Group 5 rectangles with X & O |
| + 126 - Group 6 rectangles without X & O | + 136 - Group 6 rectangles with X & O |
| + 127 - Group 7 rectangles without X & O | + 137 - Group 7 rectangles with X & O |
| + 128 - Group 8 rectangles without X & O | + 138 - Group 8 rectangles with X & O |
| + 129 - Group 9 rectangles without X & O | + 139 - Group 9 rectangles with X & O |

Discrete Audio Support for Multichannel Audio

A preference has been added that will allow Mbox Extreme to automatically take audio tracks in movies and re-assign their output to the discrete channels used by FireWire® audio interface boxes (e.g., MOTU, Fireface, RME).

These FireWire devices require audio outputs to be assigned to channels called "discrete - 0" through "discrete - 31." Most QuickTime® movies are made with mono, stereo, or 5.1/7.1 audio and the audio tracks and/or channels must be manually re-assigned to work properly with the FireWire interfaces.

With the discrete_audio preference enabled, Mbox Extreme will automatically re-assign audio channels (sequentially) to the discrete range if it encounters a movie with more than one audio track or a track with more than two channels. This means that movies with a single mono or stereo track will not be affected, but since the mono output is always assigned to discrete - 0, and stereo L & R to discrete 0 & 1, this is not an issue.