SOFTWARE RELEASE NOTES

Product: Mbox Media Server
Manufacturer: PRG
Subject: Software Version 5.0
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INTRODUCTION

Mbox Software Version 5.0

We are pleased to announce that software version 5.0 is now available for the Mbox Media Server applications including Mbox, Mbox Director, Mbox Daemon, and Mbox Remote! Mbox software version 5.0 represents a significant rewrite of many internal aspects of the Mbox media server software. The changes will provide both better compatibility with future hardware and macOS versions, and also better overall performance. The Mbox media server software is now one single application, called "Mbox" rather than three separate applications called "Mbox Designer," "Mbox Studio," and "Mbox Mini." The new Mbox application encompasses all levels of Mbox functionality and the applied license level will unlock the corresponding features.

Compatibility with Apple Silicon Processors - M1/M2/M3 - and macOS versions

One of the most significant changes in the Mbox 5.0 software is that Mbox is now a universal application, meaning that it has been rewritten to contain a universal binary and will run natively on both Apple Silicon and Intel computers.

All the Mbox v5.0 applications require at least macOS 10.14.6, the final release of Mojave. Mbox is compatible with all versions of macOS up to and including macOS 13 Ventura. Limited testing has been performed with macOS 14 Sonoma, and its use is not recommended at present time. If you must use Sonoma and experience any issues, please contact MboxSupport@prg.com for assistance.

Licensing Changes

Another significant change with Mbox v5 is in the licensing terms for the Mbox application. Licenses for prior versions of Mbox were perpetual and only valid for the corresponding major release. Mbox v5 introduces a subscription model, with an active subscription being valid for any/all future releases. All subscriptions have a one-year term and are available as either soft-license activations or with a USB key (dongle). Mbox v5 requires a different dongle type to that used for Mbox v3/v4.

New Features and Corrected Issues

Mbox:

+ When using a QLM soft-license, the Mbox application must now connect to the internet at least once every 14 days to validate the license. If the license is not validated, it will be deactivated. Connecting to the internet and activating the license will reactivate a deactivated license.

+ Increased pixel mapping limits for Mini, Studio, and Studio+ license levels - 5000, 10000, and 20000 respectively.

+ The Mbox v5 control profiles use 16-bit color (RGB), brightness, and contrast parameters on all layers and output masters.

+ The color parameters on layers now have a more linear adjustment.

+ 16-bit rendering within the application. Requires the new "Deep Color" preference to be enabled.

+ Pixel mapping now uses full 16-bit processing and true 16-bit output for 16-bit pixel types. Requires the new "Deep Color" preference to be enabled.

+ New RGBLime, Luma709, HSI, and CIExy pixel types for pixel mapping.

+ New preference, "RGBLime White Point," to allow adjustments for the RGB values that represent "lime."

+ Pixel mapping Group Controls now have six channels, due to the addition of a separate mastering channel for White/Amber/Lime - in addition to the existing Intensity mastering channel.

+ New ease in/out playmodes for: FWD Once, REV Once, Bounce Forward, and Bounce Reverse, with adjustable ease parameters using the new "Playback Ease" preference.

+ On Apple Silicon computers, it is now possible to configure Mbox with a single Blackmagic or NDI output without needing to also create a dummy "real" video output to get the application to work normally.

+ The output resolution limit warning (limit is based on license level) on the Outputs tab has been made more obvious when the limit is exceeded.

+ The Psychedelic layer blend mode has been removed, and new blend modes - Subtractive 2, Subtractive Invert 2, Hard Light, Alpha Matte, Alpha Matte Invert, and Alpha Channel Off - have been added.

+ New texture effects: Dither, Bayer Dither, Thermal, Metaballs, Z Spin, Color Temp and Tint, Line Overlay.

+ Effect #002 has been updated to include a third modifier, "Value," and the effect has been renamed as "Hue Saturation Value." All three modifiers for this effect now have a default value of 127.

+ Media files can now have a "_v..." suffix in file name to represent file versioning. The file with "latest" version will be the one that Mbox plays, other files with the same index but an older version suffix will be reported as conflicts.

+ The Output flip checkbox on the Outputs tab has been converted into a pop-up to allow for three possible flip modes - horizontal flip, vertical flip, and horizontal + vertical flip.

+ A new preference, "Absolute In/Out Frame Numbers," has been added. This preference causes the Layer In Frame and Out Frame parameters to use absolute frame number values rather than scaling the 16-bit parameter range across the number of frames in the movie.

+ A new preference. "Image Remap Control Protocol," has been added to allow manual selection of the control protocol (Art-Net or sACN) for Image Remapping screen object controls. Previously only the protocol selected on the Patch tab for Mbox main control was used for Image Remapping controls.

+ The Global Surface width and height values no longer need to be divisible by 16.

+ The Image Remapping configuration size limit is now 16,384 x 16,384 pixels for both Texture Size and Global Surface size. Both were previously limited to 8192 x 8192.

+ A serial number string has been appended to audio device names to better allow selection of the correct device if more than one connected audio device has the same name.

+ The "Movie Bitrate" preference name has been changed to "Still Image Buffer" to better represent what this preference affects and relates to.

+ X and Y position controls now have a 1:1 scaling relationship rather than 4:3, meaning that an equal amount of parameter value change causes equal X or Y position change on a layer.

+ Add new/missing formats (2K/4K DCI) to Blackmagic input configuration popups.

+ Fix issue that caused the alpha channel of ProRes 4444 movies to be opaque (i.e. no alpha channel) on Apple Silicon computers with built-in hardware decoding for ProRes content.

+ Fixes for Apple Silicon timebase issues.

+ Fix issue with incorrect output refresh rate reporting in performance HUD.

+ Fix issues with media thumbnails and Quicklook in macOS 12 Monterey and beyond.

+ Fix issue with redraw of Patch tab parameter tables when expanded on newer macOS versions.

+ Fix rounding issue with Outputs tab output X and Y origin values.

+ Fix issue with feedback stream for output master 32.

+ Mbox v5 uses the Vizrt Group's NDI$^®$ SDK version 5.5.3, and the Blackmagic Design SDK version 12.5.1.

Director:

+ Fix issue on macOS versions <u>prior</u> to macOS 10.14 Mojave where parameter sliders and edit fields were not drawn correctly.

+ Fix issue with macOS 14 Sonoma that caused parameter labels and controls to disappear when the parameter value edit field was clicked on.

+ Fix issue that caused content thumbnails not to load when the Mbox computer is running macOS 12 Monterey.

+ Fix issue where submaster window states would not correctly refresh when snapshots were recalled.

+ Fix issue submaster number indicators were not drawn correctly on newer macOS versions.

+ Fix issues/inconsistent window styling for palette, preset, and group inspector windows.

+ Fix issue where pass-through indicator was drawn upside-down on newer macOS versions.

+ Fix issue with deselect button not staying at the bottom of the Scene list table. The old button has been replaced by a new button located at top of Scene table.

+ Fix for math entry with parameter values when entering values like "+100" or "1000+1".

+ Fixes for upside-down images in UI, using default UI styles.

+ Fixes for spurious errors when getting local thumb images, or when getting thumbs fails because Mbox has no 3D object files.

+ Fix keyboard quick select for layers higher than 24 and for all output masters, fix keyboard quick select of previous output master.

Remote:

+ Image Remapping size limit is now 16,384 x 16,384 for both Texture Size and Global Surface size. Both were previously limited to 8192 x 8192.

+ Remove checks/usage for AFP file-sharing, only SMB is supported.

+ Fix issue with macOS Sonoma that caused text in the server selection pane and status tab to be hidden.

+ Fix issue with Image Remapping outline view that caused data corruption when using copy/paste.

+ Fix issue with thousands divider in pixel mapping Add/Edit Profile window that caused values above 999 to be reset improperly.

+ Fix issue on macOS versions <u>prior</u> to macOS10.14 Mojave where status streams were not drawn.

+ Fixes for upside-down images in UI, use default UI styles.

Changes and Fixes for utility applications

TC Reader:

+ Fixes to stop UI lag after the application has been running for long periods of time.

+ Check for microphone (audio input) permission in System Preferences.

Mbox Media ID:

+ New version for future compatibility.

ArtNet Tester:

+ Fix for number overlay visibility on macOS 13 Ventura.

Mbox Controller:

+ New profiles for Mbox v5.

+ Generic 8-bit channel output mode.

Known Limitations or Issues

Mbox:

+ NDI inputs are limited to 7680 x 4320.

+ Pixel mapping previs HUD currently does not work.

+ The Draw Mode parameter on playback layers currently has no function.

+ Active Silicon capture cards are no longer supported.

+ The "Spin w/ Smooth Stop" object effect (#231) now only spins on the Z axis.

+ Blackmagic Design device video output using NTSC and PAL formats currently does not work.

+ Some effects or transitions may exhibit clamping when used with YUV video inputs.

+ The Decay effect (#153) has been removed as it causes stability issues.

+ The Cartoon 2 effect (#194) has had the "smoothing" parameter eliminated as it causes stability issues.

Remote/Director:

+ With macOS 14 Sonoma, some visual elements or text may not be drawn correctly.

AVF Batch Converter:

+ The AVF Batch Converter application is currently compiled for Intel processors only. Because this is a 3rd-party application, it is unknown if there will be a universal version of this application