

Carbonite/ Carbonite Black

Software Release Information V15.0.3.18589 (CB)

V15.0.3.18589 Software Updates

New Features and Enhancements:

Support for TouchDrive 1C (compact panel)

Bug Fixes:

71489 – CB3X panels now map memory inclusions correctly.

V15.0.2.18559 Software Updates

New Features and Enhancements:

New message on TouchDrive panels when there is a network disconnect.

Bug Fixes:

71267 – TouchDrive LED calibration is now loading correctly.

71268 – TouchDrive boot and connection time is much faster.

71269 – TouchDrive does not always download the panel application with a network drop.

V15.0.1.18522 Software Updates Bug Fixes:

• **71003** — You could not assign a custom control to a user button from the 3-knob menu on TouchDrive control panel.

• **71056** — TouchDrive control panel boot time has been improved.

• **71057** — Buttons on the TouchDrive control panel light up to indicate that the system is booting up.



• **71061** — If your figure lingers on a tap of the touchscreen on the TouchDrive control panel the system interpreted this as a hold. Short holds are now interpreted as a tap.

• **71043** — The menu up arrow touch region on the touchscreen displays of the TouchDrive control panel has been made larger to make it easier to tap.

New Features and Enhancements:

• Touch feels more responsive.

V15.0.0.18504 Software Updates Bug Fixes:

- 65943 Updated Dropbear SSH server and replaced proftpd with vsftpd
- 66548 -- RossTalk KEYCUTON/OFF KEYAUTOON/OFF now work.
- 70402 Color schemes in DashBoard working correctly now.
- 51148 Ejecting an animation now clears the thumbnail from the Media page.

New Features and Enhancements:

- TouchDrive panel support
- New look DashBoard
- New DashBoard MediaManager
- Aura Theme Support
- MultiPanel support in DashBoard
- Personality configuration in DashBoard
- Expanded User Select buttons
- Import/Export sets to switcher from DashBoard
- Load/Save sets from DashBoard
- Upgrade the switcher from DashBoard
- Improved DashBoard Memory interface
- Custom Dashboard Live Assist with configurable Panel Follow

V13.0.4.17417 Software Updates Bug Fixes:

- 62053 Panel schemes changed unintentionally valid option
- 63764 Loading a SD set in SD mode can cause crash

New Features:

• Add CK alpha debug output

Print Date: 2021-02-05 Page 2 of 21 Carbonite Black v15_0_3 Release History.docx



• ME follows

V13.0.3.17165 Software Updates

Bug Fixes:

• Fixed luma error in last pixel of each line when colour correctors are enabled

V13.0.2.17165 Software Updates

New Features:

• Increase Ethernet panel timeout to 4s after a disconnect

V13.0.1.17024 Software Updates

Bug Fixes:

 Bug 61303 – PIVOTCam sends auto iris command after bad message from Pivot20

V13.0.0.16935 Software Updates

Bug Fixes:

- Bug 38294 add Next Trans to LiveAssist
- Bug 56059 trans PV affects CLN
- Bug 59390 CC record should capture all media store load messages
- Bug 59499 CC on hold stop flashing when menu changes
- Bug 60445 RossTalk devices only work when assigned to an input

New Features:

- DashBoard SoftPanel
- Bus Follows
- Custom Panel Schemes
- MediaWipe layer selection
- Web help now available inside the DashBoard UI

V12.3.0.16564 Software Updates

Print Date: 2021-02-05 Page 3 of 21 Carbonite Black v15_0_3 Release History.docx



- Bugs 58273, 58277, 58278 Panel UI LED fixes
- Bug 58640 some quad FSFC channels don't work when all in use
- Bugs 58280, 58281 mnemonic label bugs on CC banks and Key selects
- Bug 57832 Pivot Cam driver can't engage auto iris

New Features:

- Show Alpha
- Support CB+12G frame

V12.2.0.16083 Software Updates

Bug Fixes:

- Bug 48030 DashBoard disconnected from the frame
- Bug 55904 Ethernet panel no user buttons set on unconfigured system
- Bug 56625 ME copy to MiniME fails to copy BKGD when ME BKGD transition type is wipe or DVE
- Bug 56974 ViewControl shows blank page in 720p when MV is not a ViewControl layout
- Bug 57404 LiveEDL reports invalid timecode in SF23.98

New Features:

- Support CBSolo remote panel
- PivotCam driver

V12.1.1.15421 Software Updates

Bug Fixes:

• Bug 56864 - ViewControl - 720p DB ViewControl overlay incorrect

V12.1.0.15322 Software Updates

- Bug 53033 NKK router lables do not appear on the Multieviewer
- Bug 54614 CLN out loses ancillary audio
- Bug 54827 panel brightness setting non-functional



- Bug 55444 Mediastores will not play audio only clip
- Bug 55972 No PID for internally generated sources

New Features:

- New multiviewer layouts
- System clock set date
- DashBoard delete single memory
- Media store set media thumbnail frame
- Enable MiniME PST bus follows
- 1080p25
- Personality option -next trans buttons toggle
- Personality option shift button latches
- Sideshot can access CC banks 1-8

V12.0.1.14515 Software Updates

Bugs Fixed in this release:

- Bug 38374 Custom controls: pop up message notification when maxium # of events is reached
- Bug 44335 ME copy does not copy state of Roll Clip
- Bug 44998 Flown key on Multiscreen shown as on when multiscreen is disabled
- Bug 45493 Default Edge Sensitivity for CK should be "High"
- Bug 45716 Overlay and clip controls for MV appear in 3G mode, but are invalid
- Bug 46107 ME Reset should go to recall
- Bug 46239 AMP commands for Loop On and Loop Off are incorrect
- Bug 46846 Memory recall of Key Type should be controlled only by the Key Type Attribute button
- Bug 47715 The size value range of the DVE key should be adjusted when it is flown on MultiScreen
- Bug 48043 duplicate controls for ME Trans Reset Rate in CC editor
- Bug 48045 CC Editor ME Trans Clear Next command meaning is unclear
- Bug 48109 Number of CC events should be indicated
- Bug 48183 CC Editor "DVE Dual Edge" parameter is unclear
- Bug 48192 CC Editor differences between "Clear Channel" and "MClear Channel" are unclear
- Bug 48297 CC Editor CC Copy dialog does not update names
- Bug 48342 CC Editor Hmult and Vmult parameters are not a percent
- Bug 48403 CC Editor serial devices missing from CC editor
- Bug 48550 Live Assist trans limit punch pad has no default value



- Bug 48610 Rosstalk Saveset command does not appear to store all personality files
- Bug 48795 CC Audio Mixer volume and pan events don't play properly
- Bug 48839 Live Assist default clip/gain parameters are incorrect
- Bug 48923 FSFC SD frame sync letter and pillar boxes look wrong when in SD mode and converting between 4:3 - 16:9
- Bug 48924 FSFC inputting 1080p 59.94 into 1080p 29.97 vid mode is locked out
- Bug 49175 Pbus debug logs are incomplete
- Bug 49904 CB fan speed algorithm keeps FPGA temperature close to yellow warning threshold
- Bug 51352 MiniME FSFC will not frame sync non-SMPTE compliant legacy SD video
- Bug 53925 Media Wipe Media wipe audio loops if video length is greater than audio

Enhancements:

- Bug 45314 add option to disable label on incoming TSL UMD
- Bug 46197 support more than 32 characters for AMP clip names
- Bug 46567 add RossTalk LAYEROFF command
- Bug 47434 Be able to change SwitcherMode in DashBoard
- Bug 47655 TSL default mnemonic if no TSL data present
- Bug 48940 add DVE assignment to DB status page
- Bug 49341 add Delete All Memories option
- Bug 52818 Update the Carbonite Black TSL ID table to include MiniMEs
- Bug 52961 TSL should support UDP

New Features in this release:

- Carbonite Black Plus platform with I/O multiviewers, input/output format conversion and proc amps
- Multipanel up to 3 panels can control 1 frame
- Transition new media transition capabilities
- Transition white flash transition type
- Multiscreen turn off background DVEs
- Enhanced 2.5ME features
- New fade-to-black

V11.1.2.13444 Software Updates

Bug Fixes:

• Bug 49693 – GPIs that trigger CCs should resume/cancel like CC buttons



• Bug 50007 – Audio Follow Video: Fader down messages should be sent before up messages

New Features:

• Support for Carbonite Black panels and SideShot cc shot boxes

V11.1.0.13375 Software Updates

Bug Fixes:

- Bug 27281 Clean Feed doesn't show DVE/Media trans
- Bug 49082 Display panel upgrade messages for ePCH

New Features:

• Introduce MiniME FSFC switcher mode for standard Carbonite and Carbonite eXtreme

V11.0.1.13185 Software Updates

Bug Fixes:

- Bug 26719 Push-Button upgrade doesn't always show status
- Bug 43925 Carbonite eXtreme Matrix swap-over with Controller Carb B improvments
- Bug 47040 1080p29.97 Carbonite+ FSFC restriction not enforced in the UI
- Bug 48437 AMP should have option to disable the sending of EJECT before CUE

New Features:

- Support for Carbonite Black panels with Carbonite frames
- DashBoard custom control editor

V11.0.0.13043 Software Updates

- Bug 32545 Sub black colours are no longer clipped by FCFS
- Bug 42665 Audio channel can now be assigned to ME media wipes in the audio device configuration menu
- Bug 42852 Fixed memory leak associated with a media store stress test
- Bug 42895 log spam when no serial panel is connected to the frame



- Bug 44675 Performing a factory reset while a save set is in progress can crash the switcher
- Bug 44902 CC Copy doesn't handle CancelAll
- Bug 45213 Media Wipe assignment doesn't persist properly
- Bug 45280 Switcher crash after loading invalid audio installation
- Bug 45444 USB robustness improvements
- Bug 45455 Unable to fly Auto/Self key on MultiScreen from DashBoard
- Bug 45530 Factory default should change all recall attributes to Memory
- Bug 46105 Frame DIP switch #3 UI restriction is inconsitent
- Bug 46395 DB: Rstate of LiveAssist is missing the attributes of MultiScreen and MiniMEs
- Bug 46563 CarboNet following a first birthday, DashBoard can incorrectly read the IP settings as DHCP

New Features:

• Support for Carbonite Black platform (frame and panels)

V10.1.0.12337 Software Updates

Bug Fixes:

- Bug 45864 NTP security issues
- Bug 45784 Transition area can get into a bad state when copying a 4-key ME to a 2-key ME
- Bug 43891 Shift Mnemonic is sometimes missing

New Features:

• Support for CarboNet

V10.0.2.12118 Software Updates

- Bug 45477 Filling the media store cache past 2G caused issues
- Bug 45478 Loading a set during RossLinq loading causes crash
- Bug 45479 Thumbnail Generation (with icon) leaks memory



- Bug 45573 RossLinq Reloading a RossLinq forces default of Fly Key menu
- Bug 45763 LiveAssist Adjusting Foreground Reject in basic chromakey forces redraw of UI

V10.0.0.11804 Software Updates

Bug Fixes:

- Bug 43872 Carbonite Extreme crosspoint routes would affect second switcher in frame.
- Bug 34831 DVE Glitch when switching between DVE key and Chroma key
- Bug 42835 multiviewer: tally borders in 4-4-4 layout were too large on bottom
- Bug 43560 Media wipes in standard mode could cause triple cut on clean feed output
- Bug 43652 Carbonite Extreme: GPI 1 stops working if GPI 18 is set to output
- Bug 43865 TSL UMD output frequency is not what TSL equipment expects
- Bug 44734 Fixed Memory leak in GPI code

New Features:

- ME Layered Mode
- DVE Fly Key
- ME Copy
- Caprica support, pending the release of Caprica 1.3
- MiniME Key 2 can now be a DVE. Now you can do a two box in a MiniME.

9.0.0.11223 Software Updates

Bug Fixes:

• The time to it takes to capture a media store no longer gets greater and greater when doing it repeatedly.

New Features:

• 3G video formats (1080p 50/59.94)

9.0.0.11182 Software Updates

Print Date: 2021-02-05 Page 9 of 21 Carbonite Black v15_0_3 Release History.docx



- Selecting MiniMEs on Multiscreen bus no longer crashes.
- Key mask is no longer inverted.
- GPI, GPO, Tally tests are working properly again.
- IPS panels can now access Aux re-entries and MVs.
- Effects dissolve now completes the final frame of the dissolve.
- 1080psf 23.98 vid mode now works on MM and Plus frames.
- DVE zoom is slowed down to be more user-friendly.

New Features:

- Support for new panel models C3X and C3S.
- Whitecaps (aka Embedded Triggers) to send CC commands from Carbonite to Acuity/Vision. **This feature is undocumented.**
- 2.5 ME Switcher Mode. 2 ME switchers get a free 'half' ME extra.
- TSL Ingest to show TSL source names on switcher mnemonics and MV labes.
- 1080p 29.97 video format.

8.0.3.10860 Software Updates

Bug Fixes:

- Phantom fader events are no longer causing spontaneous ME transitions.
- Controlling Audio Mixers via the Serial port is fixed

New Features:

- TSL UMD Output from Carbonite Extreme can include router names with the label. There is an option for showing router names, switcher names or both.
- TSL UMD now reports information on busses (with an option to disable the bus name in the label). The new device IDs are:
 - 25 = ME1 Bkgd
 - 26 = ME1 Pst
 - 27 = ME1 Key1 Video
 - 28 = ME1 Key1 Alpha
 - 29 = ME1 Key2 Video
 - 30 = ME1 Key2 Alpha
 - 31 = ME1 Key3 Video
 - 32 = ME1 Key3 Alpha
 - 33 = ME1 Key4 Video
 - 34 = ME1 Key4 Alpha
 - 35 = ME2 Bkgd



- 36 = ME2 Pst
- 37 = ME2 Key1 Video
- 38 = ME2 Key1 Alpha
- 39 = ME2 Key2 Video
- 40 = ME2 Key2 Alpha
- 41 = ME2 Key3 Video
- 42 = ME2 Key3 Alpha
- 43 = ME2 Key4 Video
- 44 = ME2 Key4 Alpha
- 55 = Multiscreen1 Bkgd
- 56 = Multiscreen1 Pst
- 57 = Multiscreen1 Key1 Video
- 58 = Multiscreen1 Key2 Video
- 59 = Multiscreen1 Key2 Alpha
- 60 = Multiscreen2 Bkgd
- 61 = Multiscreen2 Pst
- 62 = Multiscreen2 Key1 Video
- 63 = Multiscreen2 Key2 Video
- 64 = Multiscreen2 Key2 Alpha
- 81 = MiniME1 Bkgd
- 82 = MiniME1 Pst
- 83 = MiniME1 Key1 Video
- 84 = MiniME1 Key2 Video
- 85 = MiniME1 Key2 Alpha
- 86 = MiniME2 Bkgd
- 87 = MiniME2 Pst
- 88 = MiniME2 Key1 Video
- 89 = MiniME2 Key2 Video
- 90 = MiniME2 Key2 Alpha
- 91 = MiniME3 Bkgd
- 92 = MiniME3 Pst
- 93 = MiniME3 Key1 Video
- 94 = MiniME3 Key2 Video
- 95 = MiniME3 Key2 Alpha
- 96 = MiniME4 Bkgd
- 97 = MiniME4 Pst
- 98 = MiniME4 Key1 Video
- 99 = MiniME4 Key2 Video
- 100 = MiniME4 Key2 Alpha

8.0.2.10699 Software Updates

Print Date: 2021-02-05



- Button processing changed to remove false button presses on panels.
- Key Mask center works properly in all video modes.

8.0.1.10613 Software Updates

Bug Fixes:

• Input framesync/conversion settings are no longer lost if the switcher is running in a 50 hz format.

8.0.0.10540 Software Updates

New Features:

- 4 MiniMEs, each with two keyers.
- Multiscreen with Edge blending.
- Carbonite Extreme now supports using the second matrix slot for another carbonite extreme switcher, or an NK-144 matrix card for router redundancy.
- Shaped Keying has been changed to additive keying and is more flexible.
- o "White" is available as an alpha setting to make opaque keys.
- o Carbonite can now send out PBus commands.
- o Media Manager is now available in Dashboard
- Custom Controls are now available in Dashboard
- Panel brightness can be adjusted while maintaining the current scheme.
- Carbonite Extreme router labels can now be shown in the multiviewer

Bug Fixes:

- Media Wipes are now properly shaped/unshaped
- GPI/Tally assignments now longer disappear
- GPIO numbering is now correct for Carbonite Extreme

7.3.4.9987 Software Updates

- o Installation/Personality settings are no longer lost periodically on reboot
- Media Store capture in 720p50 no longer hangs



7.3.3.9783 Software Updates

Bug Fixes:

• Rosstalk commands from Dashboard are no longer dropped periodically.

7.3.2.9554 Software Updates

Bug Fixes:

- Media Files with large USB paths no longer cause Dashboard Live Assist to crash. Any thumbnails for these files will show "Path Too Long"
- Mnemonic CC Split mode now shows the proper color (determined by a personality setting)

7.3.1.9480 Software Updates

New Features:

- Shot Recalls for Cambot
- Allow FCFS to convert from 1080i59.94 to 1080i50 (frames are dropped).
- ViewControl is available even when the multiviewer is not configured for it.

7.3.0.9363 Software Updates

New Features:

- Support for Carbonite eXtreme
 - O Switch input mapping from the router subsystem
 - O Router upgrades from the switcher
- Support for C2S Panel
- Added more support for multiviewer overlays
- o Added NK panel Switcher control

7.2.0.9130 Software Updates

New Features:

• Some switcher configuration is now available in Dashboard:



- O Reference, Video Mode, FSFC
- Outputs
- O Mnemonics
- O Multiviewer
- Some additional features were added to the Live Assist interface
 - Memory Attributes
 - O Bus Switching
- The switcher now supports 1080pSF 29.97 and 1080pSF 25 video modes.
- The Multiviewer can now display a clock that shows either the time of day, or the timecode running into the switcher.
- There are more layouts available when running the multiviewer in SD->HD mode.
- Each MLE can be switched to use either channels 2/4 (default) or 1/3 for the media wipe.
- MediaStores now use half the space the alpha channel.
- The Carbonite+ and Carbonite Multimedia frames now support Proc Amps and Color Correctors on every input.
- Supports the new C1-A panel
- Transition Preview

- Clip and Gain controls now behave in a more intuitive manner.
- Key Swap swaps sources properly
- Keyer alpha values properly max out
- Viewcontrol is no longer shifted a few pixels

7.1.1.8727 Software Updates

New Features:

- Support for the new C10 panel
- Support for new revisions of the Carbonite+ and Carbonite Multimedia input boards.

7.1.0.8574 Software Updates

New Features:

- A new CC special event for resuming running CC which is held
- Custom controls can now be copied from one location to another.



- Standard Carbonite frames can now enable 4 more DVEs at the expense of the 6 framesync/format converters.
- The switcher can send out tally and label information to any TSL UMD enabled device.
- Auto Remove Key can be enabled if the user wants the system to remove a key from the next transition area once it has been taken off air. This replaces the previous Auto Restore Key feature.
- $\circ~$ The FSFC labels in the multiviewer can now be disabled.

- The switcher no longer loses its latch value when controlling an audio mixer.
- "Edit.." overlay in ViewControl no longer disappears when the tab is renamed.
- Sources that are on air through an aux re-entry are not properly lit red on the panel.
- AMP connection recovers from being set to an invalid IP address.

7.0.0.8275 Software Updates

New Features:

- Support the new Carbonite+ and Carbonite Multimedia frames including all input conversion features.
- Support the new C2X and C2 panels
- Display test now tests the mnemonics
- RossTalk Roll Clip action is now configurable
- OSyncs have been renames to RefOs.

- Enabling the SD->HD multiviewer now defaults any outputs showing the multiviewer (since only aux 7 and 8 can be used)
- Foreground clip and Spill Reject controls in Basic Chromakey menu in Live Assist now show the correct ranges/values.
- Live assist sliders re-adjusted to prevent UI shake
- Live assist DVE pattern buttons re-ordered logically
- Double clicking trans rate labels in Live Assist now defaults properly.
- When using internal reference, status window shows N/A instead of Invalid
- Factory reset now resets the Live Assist Media Wipe button assignments.
- DVE key can no longer be inverted.
- Really Large Audio files won't crash the switcher



V6.2.0.7650 Software Updates

New Features:

- Labels on Multiviewer now reflect framesync status
- Inserting State into a Custom controls stops recording
- The file format for captured files is now PNG
- Dashboard Live Assist / Status:
 - Using Dashboard 5.0 the user can now control keyers, transitions and view status.

Bug Fixes:

• USB drives with corrupted file systems no longer crash the switcher

V6.1.1.7371 Software Updates

Bug Fixes:

• This version enables the use of a wider variety of SODIMMs.

V6.1.0.7303 Software Updates

New Features:

- Key Swap:
 - While holding a key select button, press key button in the next trans area to perform a key swap.

Bug Fixes:

• Upgrades used to fail because files are in use. This should now be fixed.

V6.0.0.7204 Software Updates

New Features:

• Enhanced MultiViewers:



- 29 user-selectable layouts for each MultiViewer, with individual choice of source label, border, aspect ratio marker, red and green tallies for each source.
- Ability to output 1080i MultiViewers on a switcher configured to operate in SD.
- $\circ~$ Ability to view up to 16 inputs on each MultiViewer.
- Ability to configure the source for the ancillary data embedded in the MultiViewer outputs – any external or internal sources.
- Audio playback from Media-Store channels:
 - Ability to embed audio content to the video of any Media-Store channel (up to 16 audio channels per Media-Store channel).
 - A multichannel WAV file can be automatically matched to a TGA/PNG file or sequence and loaded with it; or it can be loaded on its own.
 - Integration with Media-Wipe.
- Media-Store Capture:
 - Ability to capture a frame of video and store it to USB for future use.
- Remote Aux Panels:
 - External control for Aux bus assignment.
 - Up to 8 Aux Panels can be installed; with programmable constraints on what Aux bus each panel can view and control.
- Side Shot Custom Control Shot-Box:
 - Ability to run any of the 96 Custrom Control macros from an external SideShot module.
 - Existing macros are shown on the SideShot module with full mnemonic support.
- RossTalk:
 - Ability to submit commands to control the XPression Graphics system from the switcher (integrated with Custom Control macros and the Roll Clip feature)
 - Ability to receive commands over TCP/IP to perform switcher operations.
- BlackStorm server control through AMP:
 - Ability to fetch-and-cue a clip on a video server from the switcher (so that it can later be cued using Custom Control macros).
- Audio Mixer control:
 - Ability to control and reflect the status of the Yamaha O1V96 and DM-1000 audio mixers' channels (volume level & pan) from the switcher; manually (also integrated with Custom Control macros) or with "Audio Follow Video" integration.
- Configurable Tally assignments:
 - Ability to map any of the tallies to any combinations of inputs and outputs (many-to-many relationship).
- Configurable GPI assignments:
 - Ability to select the function performed when a GPI is triggered.
- Configurable Output assignments:

Print Date: 2021-02-05 Page 17 of 21 Carbonite Black v15_0_3 Release History.docx



- Output 1 to 8 and the PV output can be individually configured to any internal or external input, AUX bus, Program, Preview or Clean Feed.
- 1080pSF 23.98:
 - Ability to operate the switcher in the 1080pSF 23.98 Hz video format.
- DVE Mask:
 - The box mask and pattern mask features are now available on DVE keys.
- Aux Bus Follow:
 - Ability to select an Aux bus as the source of a MultiViewer box with following source label.
 - Ability to re-enter Aux buses on other buses.
- New Personality options:
 - The behaviour of the Auto Trans button on second press is now configurable per MLE, with a value for the MLE transition area and another for the Keyer transition area.
 - The menu auto-follow behaviour of the "next transition area" buttons can now be disabled.

- When changing the content of an existing media file on USB, the Media-Store cache, the Media-Store database and the Media-Store thumbnail generator would not be notified. The thumbnail will now automatically be updated to show the file's new content; and when this media file is loaded again in a Media-Store channel the proper media content will be loaded.
- When setting the Media Wipe Cut Frame attribute while the transition was running in the forward direction, the Media Wipe cut would not occur at the correct time if the Media Wipe transition was later run in reverse (and vice-versa). This has been resolved.
- If multiple inputs were assigned to the same tally-configured GPI output, sometimes the tally would be inactive even though one input would remain on-air. This has been resolved.
- When recalling memories containing rotated pattern masks or wash patterns with the Effects Dissolve memory attribute, the rotation parameter would not recall correctly. This has been resolved.
- When recalling memories using several DVE resources (Float or Ask resource mode), with the Effects Dissolve attribute set, some DVE keys could be dropped at the end of the dissolve even though the resources were available. This has been resolved.
- Using key copy, one could create a split key when the source key was not split. This has been resolved.
- The joystick could not be used to control pattern masks. This has been resolved.
- Some knobs in menus like the DVE or Pattern menus could show 0.0% when their on-screen value would not exactly match the default position. This has been resolved.



• Box mask size parameter changes recorded in Custom Control macros would not playback correctly. This has been resolved.

V5.1.0.6078 Software Updates

New Features:

- Adding a browser-based MultiUser GUI with media management support:
 - Ability to browse USB and internal media storage, with thumbnail or detailed views.
 - Ability to cue media files into the Media-Store channels; and start/stop playback.
 - Ability to create Media playlists on each Media-Store channel.
 - Ability to view/modify the Item Details of media loaded in Media-Store channels or imported in the Media-Store database
 - Ability to save/load Media Manager layouts (Perspectives).
- The white border around the MultiViewer boxes can now be disabled.
- The Media-Store now accepts media files with upper-case extensions.

Bug Fixes:

- LTC is now showing in the Status menu with an internal reference.
- The Media-Store cache no longer incorrectly reclaims the space of an animation when only its alpha is removed from a Media-Store channel
- The serial parity for GVG100 is now set to "odd".

V5.0.3.6008 Software Updates

Bug Fixes:

- Taking inputs on Aux outputs sometimes results in the selection of those inputs on MLE busses to fail. This has been resolved.
- Panel no longer locks up while navigating the IP address menus.
- More panel connection fixes.

V5.0.2.5792 Software Updates

Adding an option for swapping the MLE rows on a C2M and various bug fixes

Bug Fixes:

Print Date: 2021-02-05 Page 19 of 21 Carbonite Black v15_0_3 Release History.docx



- Switcher recovers better from Panel disconnection
- Switcher boot up issues resolved
- GVG100 Editor Protocol can recall/store memories on any/all MLEs
- Running Custom Controls no longer cause faders to stop working
- The last two boxes on Multiviewer 2 no longer change on reboot

V5.0.1.5678 Software Updates

Added support for the C1M control panel and fixed two bugs.

Bug Fixes:

- C2M Key 2 on MLE1 is teal colored when it should be white
- LED Calibration of some buttons is not loaded

V5.0.0.5494 (2011-07-11) Initial Release for Carbonite

Features	Carbonite 1 Single MLE	Carbonite 1 Dual MLE	Carbonite 2
Multi-Definition Inputs	16 or 24	16 or 24	16 or 24
Multi-Definition Outputs	10	10	10
Number of MLE's	1	2	2
Total Number of Keyers	4	8	8
Keyers Per MLE	4	4	4
UltraChrome Keyers (Floating)	2	2	2
Number of Floating DVE's	4	4	4
Number of Media-Stores TM (Capacity 8GB)	4	4	4
Number of Multiviewers™ with Tally and Source Names	2 (20 windows)	2 (20 windows)	2 (20 windows)
Internal Format Converters	6*	6*	6*
Internal Frame Synchronizers	6*	6*	6*
MultiUser GUITM Graphics Management	<	<	<

Print Date: 2021-02-05

Page 20 of 21

Carbonite Black v15_0_3 Release History.docx

Carbonite SOFTWARE UPDATE



Features	Carbonite 1 Single MLE	Carbonite 1 Dual MLE	Carbonite 2
Theme-Able Panel Glow RGB Buttons	*	×	*
8 Character Input and Key Source Color Mnemonics	*	×	*
Direct Access Crosspoint Buttons	16	16	24
Number of GPI/O	34	34	34
Number of Tallies	34	34	34
Pattern Generators	2	4	4
MemoryAI TM	Yes (100)	Yes (100)	Yes (100)
Custom Control Macros	×	✓	×
Animated MediaWipes TM	×	✓	×
Direct Media Store Render Via Ethernet	✓	<	×
Removable Storage Media	USB	USB	USB
Time Code Input	Yes (LTC)	Yes (LTC)	Yes (LTC)
LiveEDL™ (Generates an Edit Decision List For Use In Post Production)	*	×	*
Ethernet Ports	2	2	2
Reference Input	Black or Tri-Level	Black or Tri-Level	Black or Tri-Level
Internal Reference Generator	<	×	✓
Independently Configurable Reference Outputs	2	2	2
Editor Port	1 (RS-422)	1 (RS-422)	1 (RS-422)
Robotic Camera Control	<	<	<

Print Date: 2021-02-05