Ultra 60 Upgrade Notes

Ultra 60 9.2.1

- Release Date: December, 2025.

> ***Important:*** *Please review the* ***End User Software License Agreement*** *before installing or using this software.*

> ***Note:*** *As of version 8.2.0, the upgrade for the Application Software and OS have been combined into a single Upgrade file and procedure. This has resulted in a larger upgrade file and longer upgrade time.*

> ***Note:*** *As of version 9.0.0, the location of the Media-Store samples and captures directories have changed. Please check all memories and custom controls that might use these locations.*

Feature Enhancements

A number of features have been added, or updated, to this version of software. This section provides a brief introduction to these features, and how to use them.

v9.2.0 Features

MaxLicense Support

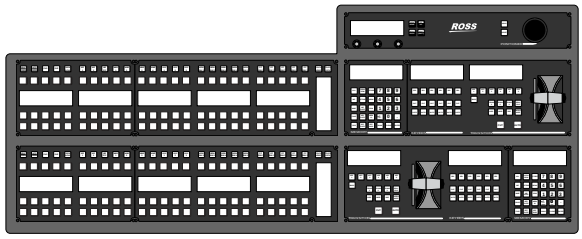
The MaxLicense (CHMFR-ADD-MAXLIC) is a universal license that can be applied to any supported Carbonite product to provide two (2) fully functional ME layers to the switcher. This will be similar to the ADD-ME2 option.

> ***Tip:*** *If the MaxLicense is requested from Ross Platform Manager it can be dynamically releases and redeployed to another switcher as needed.*

> ***Note:*** *The CHMFR-ADD-MAXLIC license must be renewed with CHMFR-ADD-MAXLIC-SM every year to be entitled to new software updates.*

TD Modular Memory Panel Support Expanded

Support has been expanded for the TD 4882AR Series Rev02 Modular Memory Panels to include the TD2S, TD3S, TD3, TD4, TDx3, and TDx4. In this configuration, the memory module is located on the far right on the bottom row.



> ***Tip:*** *Some existing panel can be upgraded to this configuration with a hardware option.*

Panel Xpt Memory Store Personality Option

A Personality option was added that allows you to hide the memory function source (mnemonic) buttons (**EFF DISS**, **MEM AI**, **PGM**, **INCLUSIONS**, **STORE**) on TouchDrive control panel.

RossTalk Chroma Key Recall

The RossTalk command for memory recalls has been expanded to include chroma key keyers.

For example, `MEM 29:CK:2` recalls memory 9 on bank 2 of Chroma Key 2.

New Devices Supported

No new device support or commands were added to this version of software.

New Devices

No new devices were added or updated for this version of software.

New/Updated Commands

No new commands were added or updated for this version of software.

Bugs Addressed

The following bugs were addressed in this version of software:

- CR-348 — Memory inclusions now work on a per-slot basis and respect MultiPanel permissions.
- CR-687 — VITC support on HD.
- CR-5610 — Always show all IO Groups in CC Input FSFC Assign events.

ROSS

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- CR-5614 — Fix glitch in Clip Player where clip would be shifted to the right.
- CR-5658 — Include UltraScene in sequencer events.
- CR-5761 — Add Output UHD Mode to Custom Controls.
- CR-6108 — Add missing scene selection association for RCP.
- CR-6224 — Fix flickering image in box 1 and box 2 of Video Processor MultiViewer layout H2-6-6 in UHDTV1.
- CR-6332 — Improve startup sequence for TSL thread.
- CR-6459 — SoftPanel can now copy all six keys.
- CR-6476 — Fix aux selection issue from touch display.
- CR-6492 — Fix random OGP disconnects, enhance networking and Caprica logs, improve heartbeat, and general OGP optimizations.
- CR-6497 — Cleanup status menu for DashBoard connections after failure.
- CR-6525 — Fixed memory leaks found in Qseven® TouchDrive panels.
- CR-6526 — Use custom names instead of hardcoded default names on panel displays.
- CR-6535 — Keep Show Alpha button on the panel lit when double pressed.
- CR-6555 — Allow Dual Delegation button text position to be manually adjusted.
- CR-6561 — Correct DashBoard connection list.
- CR-6564 — Provide message on the 3-knob display explaining how to exit during a Display Test.
- CR-6577 — Pressing the current keyer Sel button now exits CC/Memory/Aux row delegation.
- CR-6702 — Add smartctl tool to kernel for hard drive diagnostics.
- CR-6711 — Fix Roll Clip function for non ME P/P ME layers.
- CR-6712 — Fix issue where source shifts left when FS is on.
- CR-6728 — Cleanup and remove redundant field from logs.
- CR-6729 — Fix memory leak when loading Media-Store.
- CR-6744 — Fix issue where TouchDrive Panel Memory Bank Button light is offset.
- CR-6748 — Fix global memory pad bug needing to toggle from normal to legacy.
- CR-6752 — Stop RossTalk MNEM command from defaulting the mnemonic colour and icon.
- CR-6766 — Fix OGScript race condition related to non-ME transition rates.
- CR-6767 — Fix issue where GV Grass Valley® commands were being dropped.
- CR-6769 — Fix race condition and memory access issues in OGP server.
- CR-6793 — Remove invalid Flash and Dissolve buttons from vertical touch displays.
- CR-6794 — Fix SoftPanel button parsing error.
- CR-6803 — Increase range of DVE Border gain to fix sharp edges.
- CR-6804 — Fix effect dissolves to take duration into account when triggered from Caprica.
- CR-6843 — Remove Mask Force for Chromakeys in DashBoard.
- CR-6848 — Memory recall camera attribute now recalls properly.
- CR-6854 — Disable OGP connection when internal connection goes down.
- CR-6859 — Improve load time for sets with a large number of CC events.
- CR-6868 — General logging improvements and cleanup.
- CR-6874 — Prevent unexpected License Change Request from rebooting switcher.
- CR-6882 — Improve button press detection on TouchDrive panels.
- CR-6884 — Remove invalid MEs from CC event list description.
- CR-6889 — TimeCode reporting and messaging improvements.

- CR-6892 — Temperature Monitor message improvements.
- CR-6899 — Prevent thread exhaustion that could be caused by fast OGP reconnects.
- CR-6907 — Fix issue where new OGP connections can cause existing connections to hang.
- CR-6909 — Add m1app log into Diagnostic export.
- CR-6934 — CC state recalls will now use the saved effects duration.
- CR-6967 — Robustness fixes for internal messaging.
- CR-6987 — On panels change “No Still Loaded” to “No Media Loaded” for consistency with DashBoard.
- CR-6990 — Light up the correct PST buttons for media sources when the “Media Wipe” button is held on the panel regardless of shift row.
- CR-6992 — Fix media name display on TouchDrive panels to show the selected media of the row not the current selected media of another row.
- CR-7015 — Fix seg fault caused by cross-thread access.
- CR-7018 — Fix problem where messages could be processed out of order causing devices to not load correctly.
- CR-9142 — Fix a crash that could happen with invalid data in OGP CCs.
- CR-9145 — Fix bug in conversion of Media Alpha IPE to RCP input.
- CR-9146 — Fix font corruption on TouchDrive panel left side vertical display area.
- CR-9163 — Fix issues with VISCA zoom control not stopping.
- CR-9169 — Remove Box Mask Force from Panel UI for MiniME™ and Canvas.
- CR-9170 — Stop Audio faders from going to zero when using Caprica.
- CR-9174 — Improve temperature fan control.
- CR-9211 — Fix issue with 3-knob display not following when ME changes for a row.
- CR-9212 — Fix panel crash when USB is removed while in the Clip Player menu.
- CR-9221 — Fix TouchDrive Panel to properly show key type when changing from chroma to self key.

Known Issues and Limitations

Keep these notes in mind when upgrading your system to this version of software. Contact Ross Video Technical Support if you have any questions about performing a software upgrade.

External Devices

The following issues have been identified when working with external devices:

- **Disable Device** — The device disable feature in DashBoard is not available for audio mixer and some robotic cameras at this time.

Operational Notes

The following issues have been identified when working with the switcher:

- **Corrupt USB** — If you remove the USB drive while the switcher is writing to it, the USB could become corrupted and will need to be re-formatted.
- **External Re-Entry Video Errors** — A video timing error can occur when a video output of the switcher is routed back into the switcher using an input BNC. If video timing errors do occur, assigning a frame synchronizer to the input BNC will remove the timing errors.
- **Stills with same Name** — You cannot have two or more Media-Store files with the same name but different file extensions in the same folder. The switcher treats capital and lowercase letters as the same.
- **Transitions with Show Alpha** — If the show alpha feature is on, only cut transition are possible on the ME. The switcher will perform a cut at the end of the transition duration instead of the selected transition type.

- **720p in BT.2020 SDR** — The combination of 720p and the BT.2020 color gamut in SDR is not documented in the applicable standards and may not be supported by other downstream devices.
- **Sets Not Backwards Compatible** — If you save a set in one version, you may not be able to load the set in an older version of switcher software.
- **Decimal Accuracy** — DashBoard and the 3-knob menu show numerical values slightly differently. DashBoard shows values accurate to 2 decimal places and the 3-knob menu shows values rounded to 1 decimal place.
- **Jumbo Frames Not Supported** — Ethernet frames with more than 1,500 bytes of payload (Jumbo Frames) are not supported at this time. If your device has an option to send jumbo frames, it must be turned off to properly communicate with the switcher.
- **MediaWipe and DVE Wipe** — If you switch back and forth between a DVE transition and a MediaWipe DVE transition, the DVE transition may only perform a cut at the end of the transition duration. Select a different DVE transition pattern and then switch back to the pattern you want to fix the issue.
- **Fail to Recover From Momentary Loss of Power** — If the switcher experiences a momentary loss of power (<5 seconds) it may not be able to power back up on its own. Turn the power switch off, wait 10 seconds, and then turn it on again to force the switcher to restart properly.
- **Network Port LEDs** — The Link/Activity indicator on the network port does not light up at this time.
- **Mixed Power Supplies** — If you mix power supplies from different manufacturers they will not load-share. Both power supplies will report as Good and provide full redundancy for each other, but only one will provide 100% of the power to the system at any one time. If the power supply that is providing 100% of the power fails or must be removed, the remaining power supply will take over without interruption.
- **SoftPanel Restart** — Navigating to the **Diagnostic** menus may cause any SoftPanel connected to the same frame to restart.
- **ABU Support for 24Hz** — The ABU-12G 5.0.0 and ABU 4.5.1 software does not support 24Hz video formats at this time.
- **Slow First Switcher Mode Change** — When the switcher first boots up in version 8.1 there is a selection for **Cached Switcher Mode**. This **Cached Switcher Mode** has not yet been properly cached. You must load a separate **Switcher Mode** before you will be able to select a **Cached Switcher Mode** and properly load it into cache. The switcher mode caching will operate normally after the first new mode is loaded.
- **No Network Communication** — The ethernet port on the TouchDrive (AMD Ryzen™) control panel or Ultra 60 frame may not communicate properly across older network infrastructures. An RTL8152 based USB Type-A to Ethernet Adapter should be used to establish proper communications. The existing RJ45 port on the hardware is disabled when the USB ethernet adapter is detected.
- **Can't Recall Memory Without Inclusions** — The ability to store or recall a memory without inclusions to recall just a Media-Store or Aux bus is not available. If you need a memory to recall just a Media-Store or Aux bus, you must include a sacrificial inclusion, such as a chroma key.

Security & Network Vulnerabilities

The following exploits have been identified:

- **CVE-2024-6387: Remote Unauthenticated Code Execution Vulnerability in OpenSSH server** — At this time this exploit is only theoretical for 64-bit operating systems such as that used in Ultra 60.

Software Upgrade

The switcher software and OS are upgraded from DashBoard either by dragging and

dropping the software onto the Upgrade page, or by saving the upgrade file to the USB drive inserted in the frame.

Depending on the version of software you are upgrading from, your menus may be arranged or appear differently.

Note: *Contact Ross Video Technical Support for information on performing an OS Recovery upgrade.*

Software Upgrade Matrix

The following tables show supported upgrade paths for the recent versions.

Important: *For **Recovery Upgrades**, it is important to contact Ross Technical Support for the version of Recovery Upgrade you need.*

To Upgrade the Switcher Software

Use DashBoard to upload the upgrade file to the switcher.

Note: *Save your switcher setup information to a set on a separate USB drive before upgrading. This switcher set can be used as a backup in case there is a critical error during the upgrade.*

Tip: *Switcher sets are not backwards compatible. Keep an archive copy of your sets in case you want to downgrade to the previous software version.*

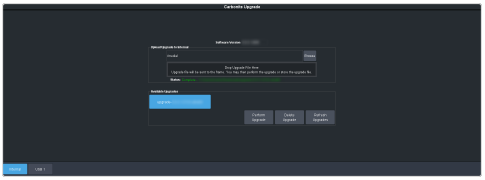
Important: *Do NOT turn the switcher power off during the upgrade. Doing so may corrupt the switcher software or damage the switcher components.*

Important: *Only ONE USB should be installed in the frame at any one time. USB drives are numbered according to the order they are discovered by the operating system and not the USB port they are installed in.*

Tip: *For best performance it is recommended that the USB drive be formatted using the exFAT file system.*

Tip: *The switcher copies the system logs to the internal drive before the upgrade. This information can be useful for Technical Support if there is an issue with the upgrade.*

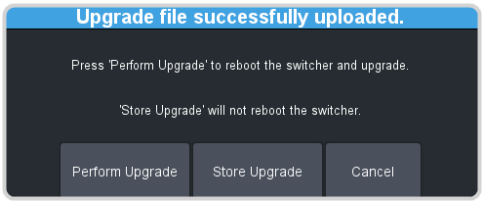
1. Click **Navigation Menu** > **Configuration** > **System** > **Upgrade**.



2. Locate the software upgrade file (`upgrade-withOS-x.x.x.xxxx.ultra60`) for the switcher.

   Tip: *You can store the upgrade file locally on the switcher without upgrading. Before uploading the file you must select either **USB X** or **Internal** as the location that the file is uploaded to.*

3. Drag and drop the upgrade file into the **Drag and Drop Upgrade** area on DashBoard. The file is uploaded and you are asked what you would like to do with the file.



   - **Perform Upgrade** — perform the upgrade with the file that was just uploaded.
   - **Store Upgrade** — store the file locally in the `upgrade` folder.
   - **Cancel** — cancel the process and delete the upgrade file from the switcher.

   Tip: *You can also upgrade from the USB or Internal storage. Click **USB X** or **Internal** and all upgrade files located on the storage device are listed. Click the file you want to use and click **Perform Upgrade**. Refer to for information on transferring upgrade files to the internal storage.*

   Tip: *You can also upgrade by clicking **Browse**, locating the upgrade file, and then clicking **Upload File**.*

   Tip: *You can delete an upgrade file by selecting the file and clicking **Delete Upgrade**.*

4. Click **OK** to confirm the upgrade.
5. Wait for the DashBoard pages to come back up. This may take a few minutes.

Tip: The glow color on the front panel of the frame will change during the upgrade and a message on the display will show the progress of upgrading the FPGAs (if required).

Upgrade Issues

If there is a problem during the upgrade procedure, an error message is shown on the display of the control panel.

Table 1: Upgrade Error Messages

Error Message	Description
`USB not inserted`	The USB drive was removed or unmounted during the upgrade. Re-insert the same USB drive back into the frame.
`USB < 1G free`	The USB drive requires at least 1GB of free space for temporary files during the upgrade. Copy the upgrade file to a larger USB drive and start the upgrade again.
`USB failure`	There has been a critical failure with the USB drive. A forced upgrade must be performed and switcher setting will have to be restored from the saved setup. Contact Ross Technical Support for support with this error.
`USB file failure`	There has been a critical failure with the files on the USB drive. A forced upgrade must be performed and switcher setting will have to be restored from the saved setup. Contact Ross Technical Support for support with this error.

To Upgrade the Carbonite Black Panel

After the frame has been upgraded and reconnected to the panel, a message may be displayed indicating that a software mismatch. You only need to upgrade the panel or CarboNET if the mismatch message is displayed.

Note: It is important to upgrade all devices connected to a frame to the same version. This includes in a MultiPanel configuration.

1. In DashBoard, double-click on the **CarbonitePanel** node for the Carbonite Black panel or CarboNET that you want to upgrade.
2. Click **Upload** > **Browse**.
3. Locate the `CarbonitePanel-v#_#_###.bin` upgrade file and click **Open**.

   *Tip: If you have multiple devices to upgrade, click **Next** and select all the devices that you want to upgrade.*
4. Click **Finish**.

   DashBoard uploads the upgrade file to the device and performs the upgrade.
5. Click **Reboot** > **OK**.