

HyperMax 12.0.1

- Release Date: June, 2026.



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

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.

v12.0.0 Features

MultiFeed

Each ME now provides up to 4 configurable program outputs (3 in UHDTV1) with matching preview. The previous PGM plus CLN 1-3 outputs have been renamed to PGM 2-4 to reflect that they are full program outputs with selectable keys and media wipe programming.

Each ME can also be split into an A-side and a B-side by assigning one or more of the PGM outputs to a second set of background and preset buses (BKGD B and PST B). When the B-side is enabled, A and B both share the transition area (type, inclusions, and rate are linked) but the background and preset buses can be transitioned independently. Memories, RossTalk, TSL 5, and the bus substitution table all support the new B-side buses and PGM 1-4 / PV 1-4 sources.

Multiple Frames - Single Panel

A single TouchDrive panel can now control up to 4 switchers at the same time. Each row of the panel can be assigned to any of the connected switchers, making it easy to run distributed systems or keep a backup ready on one row while the main production runs on the others.

When more than one switcher is connected, the row control menu on each row allows you to select the switcher. Each row inherits the color scheme, personality, bus maps, user select

assignments, and feature set of the switcher it is assigned to, so a row behaves as if the panel were directly connected to that frame.

Panel Attachments

You can now attach a custom control, or any other user select function, to any physical button on the TouchDrive control panel. When the button is pressed, the attached function runs in addition to, or instead of, the button's normal behavior. Attachments are organized into maps, and each map can be assigned to an ME or MiniME™, so the same button can perform a different action depending on which ME the row is controlling.

Each attachment can be set to **Pre** (run before the button's normal function), **Post** (run after), or **Replace** (run instead of the normal function). Attachments are part of the switcher personality, can be enabled or disabled per connection with a user select.

Custom Control Logic

Custom controls now support basic logic so that a single custom control can branch on the state of the switcher. A new Logic event category adds **IF**, **ELSE IF**, **ELSE**, and **END** events that can be inserted into the custom control timeline, along with up to 1000 user-defined CC variables that can be set, defaulted, deleted, or modified with simple math operations.

Conditional events can test bus sources, aux follows, key types, on-air and transition state, media contents and play status, clean feed configuration, transition inclusions and rates, on-air status of MEs, MiniME™s, and aux buses, and the value of any CC variable. Events between an **IF** and its **END** run only when the condition is true, allowing a single custom control to behave differently depending on what is currently happening on the switcher.

TouchDrive Panel Lock

You can now lock the entire TouchDrive panel, or individual buttons on the panel, to prevent accidental presses on rows that are not being

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used. Holding any **Touch Lock** button and pressing **Menu Lock** engages Total Panel Lock, which disables every module except **Touch Lock** and **Menu Lock**. Repeating the same action releases the lock.

To lock a single button, hold **Touch Lock** and press the button you want to lock. Locked buttons have their backlight turned off and ignore all presses. Holding **Touch Lock** displays an **Unlock All Buttons on This Row** option for that row, and pressing a locked button while the panel is in normal operation flashes **Touch Lock** pink to confirm that the press was intentionally blocked.

Memory Effects Dissolve Motion Control

Effects dissolve recalls now support four motion control options that shape how each attribute interpolates from its starting value to the value stored in the memory:

- **Smooth** (default) — starts slow, accelerates through the middle, and decelerates into the final position.
- **Linear** — interpolates at a constant speed for the entire effect.
- **Ease-In** — starts fastest and decelerates continuously into the final position.
- **Ease-Out** — starts slowest and accelerates continuously into the final position.

Motion control is stored with each memory and can be overridden on recall just like effects duration. The setting can be selected from the Memory Store and Memory Recall pages in DashBoard, and from the panel by holding **EFF DISS** in either store or recall mode.

Remote Flex Modules from SideShot-NG

A SideShot-NG can now be configured as a Remote Flex Module so that it acts as an extension of a TouchDrive panel. In Flex mode, the SideShot-NG displays custom controls and memories from the switcher that its parent panel is connected to, including full mnemonic features such as foreground, background, text, size, and execution indications.

Each panel supports up to 3 SideShot-NG enclosures as Flex Modules. The button assignments for each module are configured from DashBoard on the Personality menu.

MaxScene Recall in Sequencers

MaxScene recalls can now be added as events in a Sequencer. This brings Sequencers up to parity with custom controls, so a sequence can step through a rundown of MaxScene recalls in the same way it steps through memories and other switcher events.

Up to 280 Switcher Inputs

The maximum number of switcher inputs has been increased to 280. This makes more router and frame sources directly addressable from the switcher without needing to remap or share inputs.

MaxLicense Software Maintenance

A new **MaxLicense** software maintenance license has been added across all Carbonite platforms. The license is issued through WebKeys or RPM with a major release number and enables the switcher to run any major release up to and including the one specified. When the switcher software is later upgraded past that release, the license must be renewed before the upgraded release will run.

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

***Note:** New RCP Aux Panel Label files have been released with version 12.0.0. Many of the names have been updated and moved to accommodate the new features in 12.0.0.*

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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.

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.
- **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.
- **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.
- **Changing Pivot Position can Cause Key to Stutter** — Manually changing the pivot point of a 3D DVE may cause the key to stutter or move erratically while the point is being moved. This is the result of the key position being re-interpolated with the new pivot point. The position of the key will remain

unchanged after the adjustment of the pivot position. This will not happen during a memory recall.

- **Spaces in Media-Store Folder Names** — Spaces in Media-Store folders is not supported at this time. If there is a space in the name of the folder, the contents of that folder are not loaded into the database automatically. You must manually refresh the media item list to update the database.
- **Effects Dissolve Media X/Y Position Cuts Only** — Changes in the X/Y position of a Media-Store item during an Effects Dissolve memory recall will cut instead of transition to the new position.
- **Recalling a Memory can Change the Store Inclusions for Other Layers** — Recalling a memory on one ME or MiniME™ can cause all the inclusions for the other layers to be turned on for the Memory Store menu. Confirm the status of the inclusions before storing a memory.

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 HyperMax.

Upgrade File Verification

All the upgrade files for this version of HyperMax can be independently verified using the GNU Privacy Guard application and the signature file provided with the download.

Note: Each file has a corresponding signature file.

You will need to download and install the GNU Privacy Guard (GPG) application for the computer you want to use to verify the download files. Please visit <https://gnupg.org/index.html> to get the latest download and follow the installation instructions.

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11. Verify the other upgrade files with their corresponding signature files (.sha256).

Software Upgrade

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

Software Compatibility

Before installing any software, review the following version compatibility information.

Note: Compatibility, unless otherwise indicated, shows the combination of software versions that were tested together. Other combinations may not have all the features introduced with the most recent version of software.

Table 1: Version Compatibility

Product	Version	To Verify
HyperMax	12.0.0	The current version is shown on the Status tab in DashBoard.
Ultrix FR5-NS	7.2.0 (or higher)	The current version is shown on the Product tab of the System Status node in DashBoard.
Ultrix FR12	7.2.0 (or higher)	The current version is shown on the Product tab of the System Status node in DashBoard.
Ultracore BCS	7.2.0 (or higher)	The current version is shown on the Product tab of the System Status node in DashBoard.
DashBoard	9.16.1 (or higher)	Refer to the documentation that came with DashBoard for information on getting the current version number.
TouchDrive Panel	4.0.0 (or higher)	The current version is shown on the Status page in DashBoard for the TouchDrive node.

To Upgrade the Switcher Software

Connect to the CPU to upload and install the upgrade files on 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 system power off during the upgrade. Doing so may corrupt the switcher software or damage the switcher components.

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

1. On your computer launch your FTP client.
2. Open an FTP connection to the switcher using the following settings.
 - **Protocol** — FTP.
 - **Host** — the IP address of the Frame CPU.
 - **User** — user.
 - **Password** — password.
3. Copy the upgrade-full-####.hypermax upgrade file to the /upgrade folder.
4. Open a web browser and navigate to the IP address of the CPU. You are prompted to enter a user name and password. The defaults are user and password.
5. Click **Upgrade**.



6. Select the version of software you want to upgrade the switcher to and click **Upgrade selected version**.

Note: This stage upgrades the CPU and unpacks the upgrade files for the SDPE blades. It can take some time to complete.

Tip: You can delete an upgrade package by selecting it and clicking **Delete selected version**. This deletes the upgrade package, not the unpacked upgrade files in the upgrade folder.

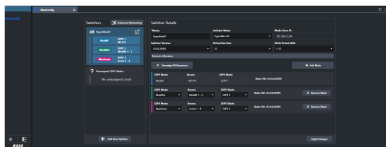
7. Click **Confirm Upgrade**.

The screen will pause for a time as the file is unpacked and the upgrade started. When the upgrade file is installed the CPU will reboot and a timer will count down until it is clear to move on to the next step.

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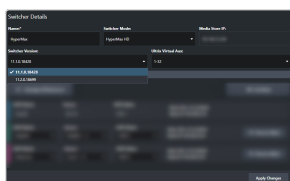
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8. Click **MaxConfig**.



9. Select the switcher that you want to upgrade and select the new software version from the **Switcher Version** list.

Tip: If the upgrade version you uploaded is not listed, refresh the page and check again.



10. Click **Apply Changes**. A countdown timer will appear to indicate that the SDPE blades are being upgraded and rebooting.



Important: When you click **Apply Changes**, the configurator will update the software on all the SDPE blades you selected a change for. Do NOT attempt to make additional changes to the configuration until all the blades are back up and running as you assigned them.

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