

Acuity™ 9.2c Upgrade Notes

- Release Date: November, 2021.



Important: If you are upgrading from v5.0, or earlier, please contact Ross Video Technical support for upgrade instructions.



Important: GV Grass Valley® editor protocols are not supported when the switcher is operating in a UHDTV1 video format at this time.

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.

9.2c Features

New Personality Options

The following switcher personality options have been added or changed.

Router Name on MV

Set whether the MultiViewer shows the router mnemonic names or the switcher names for video sources.

Press **HOME** > **Setup** > **Personality** and use the **Option** knob to select **Router Name on MV**.

- Router Name** — MultiViewer uses router mnemonic names.
- Set Name** — MultiViewer uses switcher source names.

RossTalk Updates

The following commands have been added or updated.

PGM A/B Support

Support has been added to address PGM A,B,C,D,E,F when specifying an ME for a RossTalk command.

User Variables

The USERVAR RossTalk command has been added that allows you to set a value for a CC user variable or perform an operation on an existing CC variable.

RossTalk Tria Support

Support has been added for RossTalk control of Ross Video Servers. Commands include CUE, PLAY, STOP, GOTO, JOG, LOOP, ANGLE, and EJECT.

Tally Never Option

The option has been added to have sources selected on an ME or aux bus never tallied.

Press **HOME** > **Setup** > **Installation** > **Output** > **More** > **ME / Aux Tally**.

Alternate Device Locked

If an alternate device is assigned to a primary device, but not enabled, a lock symbol is shown on the menu (Press **HOME** > **More** > **Remote Enables** > **Alternate Device**) to indicate that you cannot toggle to the alternate.

Ultritouch Adds ME Bus

A ME Bus control has been added to the Ultritouch interface to allow you to select sources on an ME and keyer from the Ultritouch.



You can switch between the Aux Panel and Shot Box interface from the popout menu.



Expanded Up-Conversion

Support has been added for up-converting a number of video format.

- 480i -> 720p 59.94Hz
- 480i -> 1080p 59.94Hz
- 720p 59.94Hz -> 1080i 59.94Hz



- 1080i 59.94Hz -> 720p 59.94Hz
- 576i -> 720p 50Hz
- 576i -> 1080p 50Hz
- 720p 50Hz -> 1080i 50Hz
- 1080i 50Hz -> 720p 50Hz

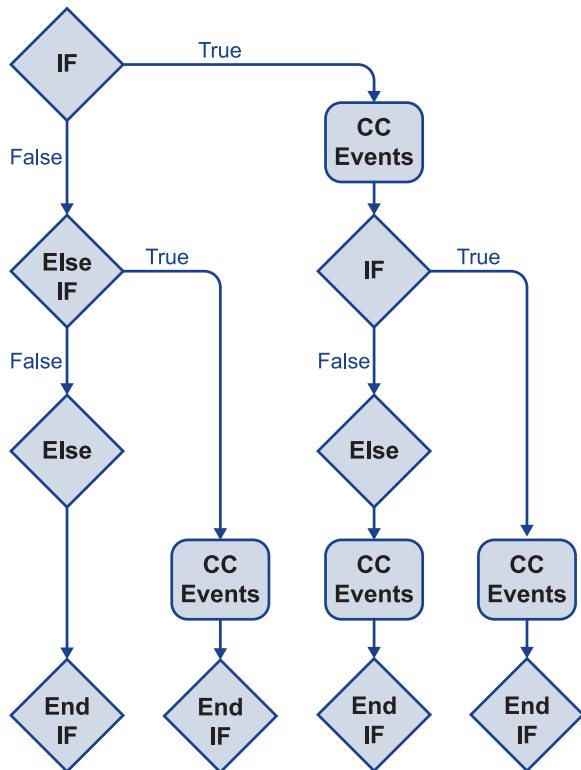
Split Self Keys Persist

When you split a Self key now, you can change the fill source without reverting the alpha. The split functionality will remain as long as the KEY MEM in not active and you don't change key types. Press the SELF key type button again to revert the split.

9.2b Features

Custom Control Logic

You can insert a logical expression (IF/ELSE) into a custom control as events. When the custom control is run the logical expression is evaluated and the results executed.



The following logical events are supported:

- **If** — the start of a boolean expression requiring a variable, operator, and condition. If the expression returns true the custom control events inserted after this event are executed. If the expression returns false the custom control jumps to the next boolean condition (**Else If** or **Else**) or end (**End If**).
- **Else If** — the start of a nested boolean expression where the parent boolean expression has returned false and another boolean expression is evaluated. An Else If, unlike an If, will only be evaluated if the parent If or Else If has returned false.
- **Else** — the end of a boolean expression where the current **If** (If or Else If) evaluation has returned false. The custom control events inserted after this event are executed only when the If evaluation returns false.
- **End If** — the end of the boolean expression. The End If is required for the expression to be evaluated properly. The custom control events inserted after this event are always executed.

Disable Device

Communications with a device can be temporarily stopped. The switcher will not attempt to connect to the device when the device is disabled. This can be useful if a device is temporarily out of service and you don't want to remove the device. This prevents the switcher from repeatedly attempting to connect to the device and logging the failed connection event.

Logging Level

Logging events can now be customized to include fewer events.

To Set the Log Level

1. Press **HOME** > **Setup** > **Installation** > **Output** > **More** > **More** > **Minimum Log Level**.
2. Use the log level knob to select the minimum log level you want recorded. Only events of the selected priority, or higher, are recorded to the logs.

- **Log Emergency** — only emergency events are logged.
- **Log Alert** — only alert and emergency events are logged.
- **Log Critical** — only critical or higher events are logged.
- **Log Error** — only error or higher events are logged.
- **Log Warning** — only warning or higher events are logged.
- **Log Notice** — only notice or higher events are logged.
- **Log Info** — only info or higher events are logged.
- **Log Debug** — all listed events are logged.

9.2a Features

New Custom Controls

A number of custom controls have been added or expanded.

Command	Description
AuxKey Rate	Set the AuxKey transition rate. Use the AuxKey Rate knob to select the rate for the transition.

Key Include

Insert Event > Special.

Command	Description
Keys Include	Set what keys are selected on the Next Transition area of the ME depending on the current state of the key. Select either the A-Side (Bkgd A) or B-Side (Bkgd B) of a split ME that you want to perform the next transition on, and then select whether a key is included in the next transition only if the key is currently on-air (Key X Off) or only included if the key is currently off-air (Key X On). If you need to set both the A-Side and B-Side, you must create separate CC events.

Transition Select

Insert Event > Special.

Command	Description
Trans Select	Set what is selected on the Next Transition area of the ME. You can set up the next transition selections for both the A-Side (Bkgd A) and B-Side (Bkgd B) of a split ME. Select the background or keys that you want to include with the next transition.

Maximum Custom Controls Running

The maximum number of custom controls that can be running at one time has been increased to 96.

B-Side Glow Color

The B-Side of a split ME can now be assigned any of the user or glow colors.

Rosstalk Updates

The following commands have been added or updated.

Acuity® Commands

The following commands can be sent to an Acuity® switcher.

Table 1: Rosstalk Commands

Command	Description
KEYAUTOON <i>ME: keyer</i>	Transitions keyer number (<i>keyer</i>) on ME number (<i>ME</i>) on-air if the key is not currently on-air. For example, if key 2 is not currently on-air on ME 3, KEYAUTOON 3 : 2 triggers a transition of key 2 on ME 3.
KEYAUTOOFF <i>ME: keyer</i>	Transitions keyer number (<i>keyer</i>) on ME number (<i>ME</i>) off-air if the key is currently on-air. For example, if key 4 is currently on-air on ME 1, KEYAUTOON 1 : 4 triggers a transition of key 4 on ME 1.

Command	Description
KEYCUTON <i>ME: keyer</i>	Cuts keyer number (<i>keyer</i>) on ME number (<i>ME</i>) on-air if the key is not currently on-air. For example, if key 2 is not currently on-air on ME 3, KEYCUTON 3 : 2 triggers a cut of key 2 on ME 3.
KEYCUTOFF <i>ME: keyer</i>	Cuts keyer number (<i>keyer</i>) on ME number (<i>ME</i>) off-air if the key is currently on-air. For example, if key 4 is currently on-air on ME 1, KEYCUTON 1 : 4 triggers a cut of key 4 on ME 1.


XPression Commands

The following commands can be sent to an XPression server.

Table 2: RossTalk Commands

Command	Description
UNCUEALL	Removes all cued items from the cued state.
UNCUE <i>takeid</i>	Remove item with take id <i>takeid</i> from the cued state.

Search Clips Name

When you are inserting a **Go To Clip** custom control event, the  allows you to type in the name of the clip you want to insert. The list jumps to the name that matches the name as you enter it.

New Custom Controls

A number of custom controls have been added or expanded.

Command	Description
AuxKey Rate	Set the AuxKey transition rate. Use the AuxKey Rate knob to select the rate for the transition.

New Device Support

The following devices or commands/interfaces were added or updated for this version of software.

New Devices

- TECNOPOINT Srl Tuning S for Panasonic® PTZ Cameras

New/Updated Commands

- Global-Store 1-4 were added as Tally IDs 4048-4051 for TSL Output mapping.

Bugs Addressed

The following bugs were address in this version of software:

- **72155** — On systems using a P1022 CPU frame card, the center crosshairs on the preview overlay where not centered.
- **72234** — Improvements to Vinten Radamec Broadcast Robotics® robotic camera control.
- **72326** — Added an Eject button to the remote control UI for AMP controlled video servers.
- **72378** — Improvements to the Alternate Device menu.
- **72405, 72408** — Ultritouch improvements for aux bus support.
- **72635** — Improvements to Ross Video Furio robotic camera control.
- **73043** — Improvements to Panasonic® robotic camera control.
- **72512** — Users were unable to set Program C color gamut or dynamic range.
- **ACT-192** — “Run From Here” did not work while editing Custom Controls.
- **ACT-202** — Custom devices have been removed from the communication setup menu.
- **ACT-1369** — When entering a RossTalkXPN type in command, the message “command cannot be empty would always be displayed.

- **ACT-1897** — Improvements were made for looping video when controlling an EVS[®] maXS.
- **ACT-1991** — Occasionally, software options would be deleted.
- **ACT-1945** — The minimum panel OS required has been increased to OS49.
- **ACT-2008** — When used with OverDrive[®], video clips from an AMP controlled video server where being falsely marked as not being UTF-8 compliant.

Known Issues and Limitations

Keep these notes in mind when upgrading your switcher 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:

- **TargetMachine Settings** — Check all TargetMachine extra option settings after performing an upgrade. Extra option settings may revert to default values after an upgrade.
- **Video Servers (VDCP)** — You may experience communication problems after performing an upgrade. Please verify the channel and sub address settings for the video server on the BNC Menu. These values must match the settings on the video server you are trying to control.
- **EVS maXS** — If you experience pausing during clip playback, perform the following procedure whenever the control panel is restarted:
 1. Set the **Port Cmd** option to **Yes**.
 2. On any bus, select each crosspoint that is associated with an EVS maXS channel.
 3. Set the **Port Cmd** option to **No**.
- **Avid AirSpeed and OverDrive[®]** — If you are using the Avid AirSpeed Video Server with the OverDrive[®] Production Control System, you must set the Playback Mode to PB from the Extra Options on the Communications 1-2 menu on the switcher.
- **GVG Profile Video Server, Looping** — The GVG Profile Video Server does not support Looping at this time. Turning looping on may cause undesired video aberrations when the loop is performed.
- **Audio Memory Custom Control** — The Euphonix Audio Mixer does not support Audio Memory Custom Controls at this time.
- **Harris Inscribe CG Custom Controls** — When you create a custom control for the Inscribe, you cannot include Select Effect or Run Effects commands.
- **Harris Inscribe Before Version 5.0** — If the Inscribe is set to before 5.0 on the Communications Menu, the switcher may stop loading pages on the CG correctly. Setting the Inscribe to 5.0 or later, confirming, and then back to before 5.0 should clear the problem.
- **Harris Inscribe G-Scribe Strata Layers** — For the G-Scribe, you do not need to set the Strata Layers, the software will configure this automatically.
- **Robotic Camera Control and Editors/OverDrive[®]** — If you are using the Robotic Camera Control menu while the Editor Remote Enable is active, you may experience menu errors.
- **Avid Deko** — If you are trying to control the Avid Deko from the switcher over ethernet, please contact Ross Video Technical Support for information on interface issues.
- **Gallery Sienna Looping Clips** — Looping of a clip from the switcher is not supported at this time.
- **Gallery Sienna Clip Control** — Selecting and cueing a clip from the switcher is not supported at this time. Only basic transport commands such as play, pause, stop, rewind, and fast forward are supported.
- **Execute Macro Custom Control Commands** — When you create a custom control with multiple Execute Macro commands in it, you

must insert a 10-15 frame pause between all the Execute Macro commands.

- **Miranda HMP-1801 Clip Names** — The cumulative size of all clip names on the HMP-1801 must be less than 100 characters for the switcher to properly interface with it.
- **Miranda HMP-1801 Recorded Clip Names** — When you record a clip on the HMP-1801 from the switcher, the clip is named the same as the last clip you recorded on the HMP-1801. You must rename the clip after it has been captured.
- **GPI Outputs on Reboot** — The GPI outputs may trigger, or come up in an unknown state, when the switcher is restarted or rebooted.
- **Canon Camera Manual Control** — The Canon Cameras do not report their current state to the switcher. Under manual control, this means that the expected value that the switcher has, and the actual value on the camera, may not be the same. This can result in a small adjustment to a value from the switcher causing a dramatic change on the camera as the switcher and camera synchronize values.
- **Canon Camera Iris Control** — In Manual mode, the iris control from the switcher controls the iris function of the camera. In Auto mode, the iris control from the switcher controls the AE level of the camera.

Operational Notes

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

- **Relative Custom Control (MultiPanel)** — You cannot run the same relative custom control on different control panels at the same time.
- **Stopping Custom Controls (MultiPanel)** — Only the control panel that starts a custom control can stop that custom control.
- **ME-Store Animation Playback** — If you change any values in the Installation menu while an ME-Store animation is playing, the animation will re-start when you confirm

the Installation menu changes. Global-Store animations are unaffected.

- **Border/Trails Video Delay** — Turning Borders or Trails on for a key will cause a one (1) frame delay in the video on the keyer.
- **Switching Between Borders and Trails** — If you switch between a Trails mode to a Border mode and back again, the key may flash when a Trails mode is selected the second time.
- **Key Trails on a Flying Key** — If you apply a Key Trail or Key Smear Trail to a Shaped Flying Key, a visible black line may be displayed next to the key.
- **Satellite Control Panels and NTP Servers** — If the switcher is connected to a Network Time Protocol (NTP) server, the satellite panels only receive date and time information when they first connect to the frame.
- **MultiViewer Overlay Cropping** — The overlay borders on the MultiViewer output cover a portion of the active video. This is equal to 24 lines per frame on the large boxes, and 48 lines per frame on the smaller boxes. This only effects the MultiViewer output.
- **Recall Installation May Reboot Boards** — If you recall an installation register that requires a hardware reconfiguration, the required boards will reboot when the recall is confirmed.
- **All-All Reset in Custom Controls** — If you include an ALL+ALL reset of the control panel in a custom control, it must be the last or only event in the custom control.
- **OverDrive® Assigned Channel Names** — OverDrive can assign names to channels, and channels to faders on the Audio Control module. These settings persist even after the Editor has been disabled. You must perform an All+All reset to return the names and fader assignments to the switcher default assignments.
- **Global-Store Capture Won't Complete** — If you perform a Global-Store capture and

the capture complete message does not appear (the **Capture** button remains gray), you must restart your switcher to regain the capture functionality.

- **ME-Store Cannot be used for Video Wash** — If an ME-Store is selected on the bus that is selected for a video wash, a Global-Store channel is shown instead. The menus and mnemonics are not updated to show which Global-Store is selected instead.
- **Maximum Custom Control** — It is possible to run out of space in the custom control buffer before reaching the maximum number of custom controls. The size of a custom control depends on its complexity. The more basic the custom control, the less space it takes in the buffer and the more custom controls you can have.
- **WebDAV Not Supported** — WebDAV is no longer supported for transferring files onto the switcher.
- **VNC Viewer Not Supported** — The VNC viewer service from the WebUI is no longer supported by the current versions of Internet Explorer®, Firefox®, or Google Chrome™ or the latest version of Java™.
- **Background + Key DVE Transition** — If you perform a background and keys DVE transition on Program A, the keys will be turned on for Program C, D, E, and F as well.
- **AuxKey Bus Hold** — If you do not assign all the buses of an AuxKey to an Aux bus, the bus hold feature will not operate on those buses.
- **Default Auto Key Alpha Settings** — The default setting for the Auto Key Alpha personality option has been changed from Relaxed to Strict. In some cases this may cause the personality setting to switch to Strict.
- **Hardware Status Reporting Error** — The software version and build date for some cards in the switcher may not report properly after an upgrade. This is caused by the timing in which the boards and cards boot up and report their status. This does not impact the functionality of the cards.
- **Hardware Status Stuck at InProgress** — Some cards in the switcher may not properly report that they have completed the upgrade. The hardware status page will report the upgrade as in progress even after the card has completed the upgrade. This does not impact the functionality of the cards.
- **Beep on Bootup** — The Acuity™ control panel with the 4820AR-235-01 Control Panel CPU will beep when the control panel boots up. This is normal behaviour.
- **Panel Row Mapping** — When you upgrade to version 5.0 and OS42, the mapping of panel rows on the control panel will be reversed. You must remap the modules to panel rows to correct the order.
- **Borders in UHDTV1** — You can only have a matte color for a border applied to preset pattern key or a wipe in UHDTV1.
- **Color Bars** — When the MultiProcessor Input or 12G MultiProcessor Input boards power up, or re-acquire reference, an internal self-test shows color bars on all inputs and outputs of the board. This will temporarily replace the inputs and input MultiViewer with color bars. This is normal behavior.
- **Global-Store Audio Not Supported on Older CPU** — Global-Store Audio is only supported on the newer Frame CPU, 4810AR-002 (P1022).
- **Global-Store Load Times** — Loading media items is much faster (up to 3 times) with the new Frame CPU (4810AR-002) compared to the older Frame CPU (4800AR-002) when running version 8.0a software.
- **Floating DVE on MultiViewer** — The floating DVE outputs (**MVX DVEY**) for DVE 2 and DVE 4 are ignored during a DVE wipe and do not show the actual alpha signal for the DVE key.
- **Device Errors on Load Setup** — Devices should always be set up on the same port in different switcher sets. If different devices are set up on the same port in different sets and you load one of those sets, messages for one device can be sent to the other resulting in invalid messages or unexpected behavior.

- **AuxKey Tallies** — An AuxKey can only be tallied as on-air when it is cut on-air.
- **DVE Menu Adjustments** — The buttons on the DVE menus adjust the value an amount that is too small to always register a change onscreen or on the menus. You may have to use the knobs or press the menu buttons multiple times to change the value.
- **Audio Capture** — When you capture audio in the Media-Store, all available audio channels are captured to RAM. Only when the media is stored is the number of channels corrected to what was selected during the capture.
- **Media-Store Re-build Time** — When you upgrade to 9.0a, or higher, the thumbnails for the Media-Store items must be re-built and may appear corrupt during the process. This re-build may take several minutes, depending on the number of media items you have. If you have a single frame cut point in your media item, you may have to re-insert the cut point.
- **Key 5-8 in 4-Keyer Switcher** — If you don't have the 8-Keyer option installed, keyers 5-8 used to be selectable but would only show black. Keyers 5-8 are now not selectable in a 4-Keyer system.

Hardware Issues

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

- **3D DVE Upgrade** — If you upgrade to the 3D DVE option for the 4RU frame, a minimum of two (2) power supplies are required.
- **MultiProcessor Input Upgrade** — If you are replacing a Video Input board with a MultiProcessor Input board, ensure that all of the inputs are set to the same format that the switcher is operating in. If an input is not set to the same format that the switcher is operating, the MultiProcessor Input board may become unresponsive.

Software Upgrade

Software upgrades are performed from the web interface to the switcher frame. You must download the upgrade files and have them on a computer connected to the switcher over Ethernet to perform the upgrade.



Important: If you are upgrading from v5.0, or earlier, please contact Ross Video Technical support for upgrade instructions.

Upgrade Compatibility

Before upgrading your switcher, review the following version compatibility information.

Table 3: Upgrade Compatibility

Product	Compatibility
OverDrive® Production Control System	This version of software has been tested with OverDrive®.
Vision	The Vision control panel with the AP-VISION-MENU-UPG or AP-VISION-MENU-EXT-UPG option is supported by this version of software.
Octane®	The Octane® frames are not supported by this version of software.

Downgrade Compatibility

Contact Ross Video Technical Support for information on downgrading to a previous version.

Note: Always check the hardware compatibility, [Hardware Compatibility](#) on page 8, to make sure that the boards are cards in your switcher are compatible with the software version you are downgrading to.

- **9.2a** — If you downgrade from 9.2a, or later, to an earlier version, some devices that previously used a FlexDevice driver may not be configured correctly.

Hardware Compatibility

Before upgrading or downgrading your switcher, review the following hardware compatibility information.



Important: The Octane® frame is not compatible with Acuity™ software. If you are upgrading from Octane® to Acuity™ you must contact Technical Support for information on getting a new frame and supported boards.

Table 4: Hardware Compatibility

Version	Hardware
9.1 or higher	<ul style="list-style-type: none"> 4810AR-002-07 — Frame CPU board
7.0b or higher	<ul style="list-style-type: none"> 4810AR-065-02 — 12G MultiProcessor Input 4810AR-066-02 — 12G Output 4820AR-236-01 — Control Panel CPU (sled)
5.0 or higher	<ul style="list-style-type: none"> 4820AR-235-01 — Control Panel CPU (sled) 4820AR-243-01 — Touchscreen Display (AP-TOUCHSCREEN-A)
4.0 or higher	<ul style="list-style-type: none"> 4800AR-043A-03 — 3G Video Processor board 4810AR-002-06 — Frame CPU board 4810AR-063-02 — MultiProcessor Input board 4810AR-064A-03 — Video Output board
2.1 or higher	<ul style="list-style-type: none"> 4810AR-063-01 — Input Processor Board

Backup Switcher Registers

Because the software upgrade process automatically returns the switcher to default values, it is important that you back up all switcher registers to the hard drive.

To Back up Switcher Registers

1. Press **HOME > Disk > Dest/Source**.
2. Use the **Disk Type** knob to select **Hard Drive**.
3. Use the **Set Names** knob to select the Setup you want to store the registers to.
4. Press **Store**.
5. Press **All** to store all categories of registers to the selected Setup.

Prepare the Switcher Before an Upgrade

Recalling the factory default settings for the switcher before the upgrade ensures that all the

boards, cards, and modules on the switcher are in a known state, and are ready to accept an upgrade. The switcher must then be set back to the proper reference format before the upgrade.

To Perform a Factory Default

1. Press **HOME > Setup > Installation > More > More > Recall Factory**.
2. Default every register on the menu in turn.
3. Press **HOME > Confirm**.

Power Down all Satellite Panels

To ensure that all control panels upgrade properly, you should power down any satellite panels before performing the upgrade. After the upgrade has been completed, you can power on each of your satellite panels and upgrade them.

To Set Video Reference

The factory default procedure resets the reference format. You must set the reference back to the input reference that is connected to the switcher before starting the upgrade.



Important: A valid reference signal must be present to perform the upgrade. If an external reference is not available, use an internal reference.

1. Press **HOME > Setup > Installation > More > Reference**.
2. Use the **Ref Board** knob to select the board you have connected reference to.
3. Use the **Ref Format** knob to select the format of the input reference.
4. Use the **Video Format** knob to select the video format you want the switcher to operate in.
5. Press **HOME > Confirm**.

Performing the Upgrade

Depending on the number of boards, cards and modules in the switcher, and the current version of software on them, it will take between 15 and 40 minutes to complete the upgrade.

Note: After the Factory Default is performed, the Bus Maps and Output BNC settings have been changed to the default settings.

Ensure that you can find a source button that is assigned to a valid input, and that you have a monitor connected to a default Aux Bus output of your switcher. You will need to verify that the switcher is passing video properly after the upgrade.

To Upgrade the Switcher Software

1. Open a web browser and navigate to the IP address of the switcher frame. You are prompted to enter a user name and password. The defaults are **user** and **password**.

2. Click **Upgrade**.

The **Upgrade Page** lists all the previous upgrade packages that were stored on the hard drive of the frame.

3. Enter a name for the upgrade package in the **New_Name** field.

This must be unique and descriptive enough to allow you to easily identify it at a later point. Upgrade package names can only include numbers, letters, periods, and underscores or dashes. Spaces and other symbols are not allowed.

4. Click **Choose File**.
5. Locate the upgrade package file you want to upload to the switcher on your computer. The file is named `frame-<version>-<build>.tgz`.
6. Click **Open/Choose** to select the file. The file path and name appears in the **Select File to Upload** field.
7. Click **Upgrade Selected Version**.



Important: Do not reload/refresh the web page while the upgrade file is being downloaded and activated. It can take several minutes for the file to be uploaded to the switcher, depending on network congestion.

8. Click **Choose File**.
9. Locate the upgrade package file you want to upload to the switcher on your computer. The file is named `panel-<version>-<build>.tgz`.
10. Click **Open/Choose** to select the file.

The file path and name appear in the **Panel File to Upload** field. If the switcher is unable to verify that the file is an upgrade package, an error message is displayed.

11. Click **Add This File**.
12. Wait while the switcher installs the software version. This may take a few minutes. When the software version has been installed, the **Additional Files** page is displayed.

Note: If you receive a warning that the upgrade has failed because the flash is full (*Rsync failed, is flash full?*), check the remaining Application Flash in the Storage Capacity section of the **System Info** page. If the remaining capacity is less than 2M, you must delete a number of FlexDevice drivers to free up space for the upgrade. You can re-install the FlexDevice drivers after the upgrade. Once you have freed up the required space, try the upgrade again.

13. Click **Perform Upgrade** to restart the switcher.

This cycles the logs on the switcher and propagates the upgrade to all the boards, cards and modules on the switcher.

Note: If a message asking you to Reboot the control panel appears on the control panel menu, click **Cancel**. You will be rebooting the entire switcher in a later step.

14. Allow the switcher to propagate the upgrade to all the boards and cards by waiting at least 20 mins before proceeding to the next step.
15. Wait for the **System Information** page to be displayed and the upgrade to complete.

Tip: The progress of the upgrade is shown at the top of the **System Information** page.

- Periodically reload/refresh the **System Information** page until all the items listed have Done as their Status.

Upgrade Errors

Table 5: Error Messages and Resolutions

Error Message	Resolution
If the message The software versions of the panel and frame do not match is shown, you need to upgrade your panel.	Press HOME > More > System Shutdown > Upgrade Panel . Depending on the upgrade that is required, it may take several minutes for the upgrade to complete. The control panel should reboot after the upgrade is complete.
If the message PMCs need to be upgraded; please go to Panel Modules menu is shown, you need to upgrade your PMCs.	Press HOME > Setup > More > Panel Modules > Upgrade PMCs .

frame, and upgrade them. Power on each Satellite Panel, in order, to upgrade it. Ensure that a Satellite Panel is upgraded properly before powering on the next one.

Refer to the *Setup Manual*, for information on adding Satellite Panels to the switcher.

Tip: If the message The software versions of the panel and frame do not match is shown, restart the Satellite Panel to trigger the upgrade.

To Restore Switcher Registers

1. Press **HOME > Disk > Dest/Source**.
2. Use the **Disk Type** knob to select **Hard Drive**.
3. Use the **Set Names** knob to select the Setup you want to store the registers to.
4. Press **Recall**.
5. Press **All** to recall all categories of registers from the selected Setup.

Restoring the Switcher After the Upgrade

Rebooting the switcher after the upgrade ensures that all the boards, cards, and modules on the switcher are properly upgraded and initialized. If a board, card or module was not properly upgraded, the switcher attempts to upgrade and initialize it again with the reboot. Once the upgrade is complete, you can restore your switcher registers.

To Reboot the Switcher

1. Press **HOME > More > System Shutdown > Shut Down**.
2. Toggle the power switches in the frame and control panel to Off.
3. Wait at least 6 seconds for the System Status Indicators on the frame to go out.
4. Toggle the power switches in the control panel and the frame, to On.
5. Toggle the power switch on the control panel Control Panel CPU to On.

Upgrading Satellite Panels

With the upgrade complete, you can power on each of the Satellite Panels, connect them to the