

Ultrix Acuity 13.0e Upgrade Notes

- Release Date: July, 2024.



Important: GV Grass Valley® editor protocols are not supported when the switcher is operating in a UHD TV1 video format at this time.

Note: For the 12.1a upgrade you may have to add a second Panel file to support different revisions of TouchDrive hardware from the same frame.

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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.

13.0e Features

Chroma Key Mem Use Personality Option

A new Personality option was added that allows you to set whether the Key Memory (**KEY MEM**) function will recall the chroma key settings or just the key source.

13.0b Features

Map Flex Control Modules (TD3 & TD4 Only)

You can now map the button sections on the Flex Control modules to the module.

- Press **HOME > Setup > More > Panel Modules > More > Configure Flex Modules**



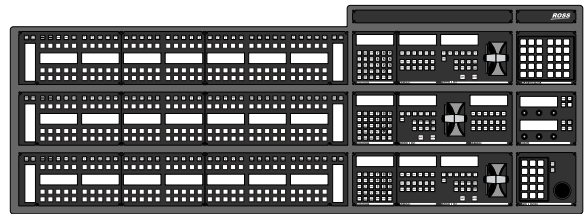
Important: Do not reconfigure the panel modules unless instructed to do so. Misconfiguration of a panel module can cause unexpected behavior.

13.0a Features

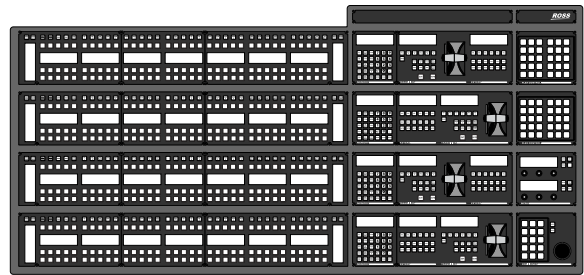
TouchDrive 3 and 4 Panels

Support has been added for the new 35 crosspoint TD3 and TD4 panels. These new panels come with a number of new and updated areas to better enhance operation.

TD3 Panel



TD4 Panel



Flex Control

The new Flex Control module on these panels is made up of user selectable buttons with integrated displays. Similar to user buttons on the panel row, these buttons can have various functions assigned to them from the same User Button Assignment menu.

Positioner

The Positioner area on these panels has been expanded to include a bank of user selectable buttons with integrated displays, the same as on the Flex Control modules.

Addition Row Control

A vertical Row Control area has been added to the left side of the source row on these panels.

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The two areas mirror each other and allow you to access the row control from either end of the panel.

Double 3-knob menu Menu

The new stacked menu module on these panels mirror the two menu areas of the Main Menu system. The top display shows the upper menu area and the bottom display the lower menu area.

TD3 and TD4 Split Row Assignment

On the TD3 and TD4 panels, assigning a row to a Split ME will assign the A-Side to the left side of the row (first 15 source buttons) and the B-Side to the right side of the row (next 15 source buttons). The Row Control menu on the left controls the A-Side and the one on the right controls the B-Side. The 5 shift buttons on the right apply to both the A-Side and B-Side. The Key bus follows the same split with the left side being assigned to one keyer and the right side assigned to another.

You can assign the entire row to PGM A or B with the Split ME Bus Personality option.

New Device Support

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

New Devices

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

New/Updated Commands

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

Bugs Addressed

The following bugs were addressed in this version of software:

- ACT-3666 — Initialize Panel Bus Map Menu shows 8 MEs when system only has 4 ME.

- ACT-3690 — Input source names can't be changed starting at input 163.
- ACT-3744 — “ Down ” arrows missing in dropdowns for changing Ref Format and Video Format.
- ACT-3759 — Clip list issue with Tria AMP.
- ACT-3862 — Allow audio clips with same name as video sequence.
- ACT-3860 — Save clip and gain with Media-Store items.
- ACT-3869 — Audio properties for Media-Store items can only be set on ME 1.
- ACT-3931 — Key source on bus follow with roll clip active gets reset to black.
- ACT-3967 — PGM A and PGM B Rows not switching.
- ACT-4029 — During DataLinq setup the IP address gets truncated.
- ACT-4030 — VDCP clip name truncated when inserting “ Cue ClipList ” CC event via insert event.
- ACT-4035 — Key Alpha text and source name corrupt in **Auto Key Setup** menu.

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.
- **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.
- **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.
- **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.
- **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.
- **Legacy CC Commands** — Custom controls recorded on legacy Acuity® may contain commands that are not supported on Ultrix Acuity. You should review your custom controls before trying to use them. CCs with unsupported commands are flagged on the menu.
- **Serial Device** — Serial device connections to the frame are not supported at this time.
- **No Aux Source** — When a switcher aux bus is first created in the router database, it doesn't have a source assigned to it. When that aux bus is assigned to a router destination, the output shows the last valid source assigned to that destination until a source is selected on the aux bus from the switcher. The aux bus will retain a valid source in the database from this point forward.
- **No Swipe on Virtual Panel** — You can swipe on the displays of the TouchDrive control panel to make selections like wipe patterns. This functionality is not supported on the virtual panel at this time.
- **Factory Default of SDPE Blades in Custom Slots** — Factory default does not support blades in custom slots. If you perform a factory default with SDPE blades not in their default slots, you must reconfigure the SDPE blades to regain ME functionality.
- **DVE Video Errors when Moving** — There may be video errors when two intersecting DVE channels are moved horizontally at the same time.
- **Switcher Set with No ME Assignment** — If you recall a switcher set that does not have proper ME to Slot Assignment, the output of the ME will be black. You must assign the MEs to the proper Ultrix™ slots (Press **HOME** > **Setup** > **Installation** > **More** > **More** > **SDPE Configuration** > **ME to Slot Assignment**).
- **Time Zone Data Not Backwards Compatible** — If you downgrade from 12.1h, or higher, to 12.1e, or lower, the time zone data will become corrupt. You must set the Time Zone to **NONE** before downgrading.

Hardware Issues

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

- **REF A Only** — The switcher receives the trigger/reference signal internally from the router. Only REF A is supported at this time.
- **Flex Control Module Startup Issue** — The Flex Control modules on the TD3 and TD4 panels may not initialize properly when the panel boots up and will remain dark. Reboot the panel to re-initialize the modules.
- **Flex Control Buttons on Positioner Module Don't Show Labels** — On the TD3 control panel, the Flex Control buttons on the Positioner Module can become misconfigured. You must reconfigure the module. Press **HOME > Setup > More > Panel Modules > More > Configure Flex Modules**, use the **Module** knob to select **Positioner**, and press a button on the Flex Control area of the Positioner module.

Upgrade File Verification

All the upgrade files for this version of Ultrix Acuity 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.

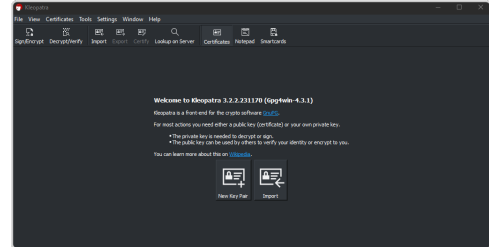
To Verify the Upgrade Files

Each upgrade file is verified independently.

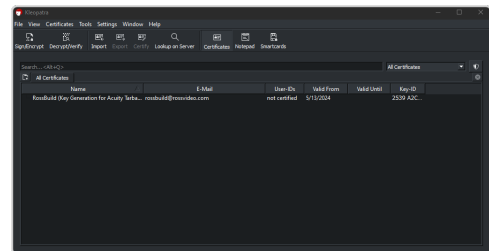
Download and install the GPG verification tool from <https://gnupg.org/index.html>.

Note: The signature files are located on the USB that came with your switcher and in the download package for software upgrades.

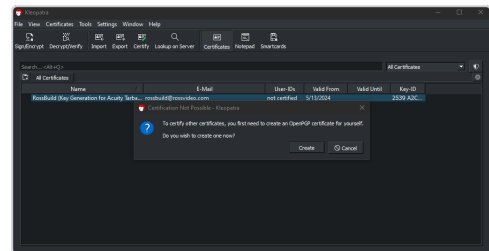
1. Launch the **Kleopatra** application installed by GPG.



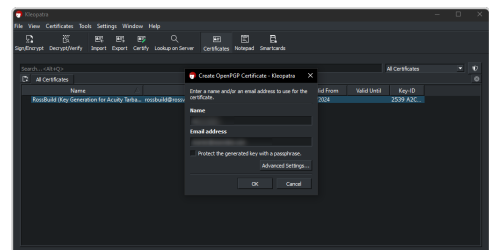
2. Click **Import** and select the `acuity.gpg` file.



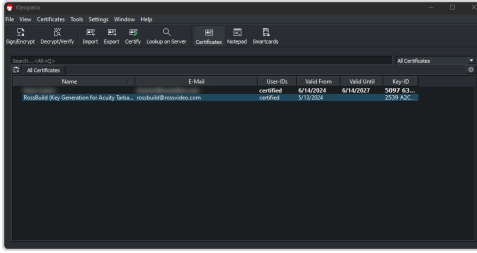
3. Right-click on the new `Rosbuild` entry and click **Certify**.



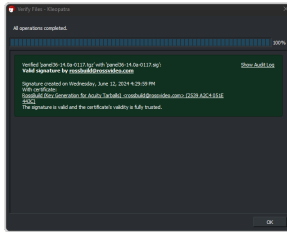
4. Click **Create**.



5. Enter a name and email address in the **Name** and **Email address** fields and click **OK** to create a local certificate with those credentials.



6. Click **Decrypt/Verify** and select the signature file (for example panel136-14.0a-0117.sig) for the upgrade file that you want to verify. It will have the same filename as the upgrade file but with a .sig extension.
7. Click **Open**.
8. Select the upgrade file (for example panel136-14.0a-0117.tgz) that you want to verify.
9. Click **Open**.
10. The application will check the file against the signature and verify it.



! *Important:* If an upgrade file does not pass verification, do not use the files and contact Ross Video Technical Support.

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

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:* Ultrix Acuity version 12.1a, or higher, requires Ultrix™ 4.9.1, or higher.

Note: Contact Ross Video Technical Support for information on upgrading Ultrix™.

Table 1: Version Compatibility

Product	Version	To Verify
Acuity®	13.0e	The current version is shown on the Main Menu (1-2) of the switcher menu.
Ultrix FR5	5.5.0	The current version is shown on the Product tab of the System Status node in Dashboard.
Ultrix FR12	5.5.0	The current version is shown on the Product tab of the System Status node in Dashboard.
Ultracore BCS	5.5.0	The current version is shown on the Product tab of the System Status node in Dashboard.
TouchDrive HWRev 02 (Qseven®)	switcherOS 65	Press HOME > Status > Complete Status and scroll down to Panel OS Version .
TouchDrive HWRev 03 (AMD Ryzen™)	switcherOS 67	
TouchDrive 4882AR Series (AMD Ryzen™)	switcherOS 67	

Upgrade Compatibility

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

Table 2: Upgrade Compatibility

Product	Compatibility
TouchDrive 4882AR Series	YES — The 4882AR Series (AMD Ryzen™) TouchDrive control panel is supported by this version of software.
TouchDrive HW Rev 03	YES — Hardware revision 03 (AMD Ryzen™) of the TouchDrive control panel is supported by this version of software.
TouchDrive HW Rev 02	YES — Hardware revision 02 (Qseven®) of the TouchDrive control panel is supported by this version of software.



Product	Compatibility
OverDrive® Production Control System	YES — This version of software has been tested with OverDrive®.
Ultrix Acuity	YES — The Ultrix Acuity system is supported by this version of software.
Legacy Acuity®	NO — The Acuity® frame is not supported by this version of software.
Vision	NO — The Vision control panel with the AP-VISION-MENU-UPG or AP-VISION-MENU-EXT-UPG option are not supported by this version of software.
Octane®	NO — 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 7, to make sure that the boards and cards in your switcher are compatible with the software version you are downgrading to.

- **12.1h** — If you downgrade from 12.1h, or higher, to 12.1e, or lower, the time zone data will become corrupt. You must set the Time Zone to NONE before downgrading.
- **12.1a** — If you downgrade from 12.1a, or later, you will not be able to connect to the TouchDrive (HW Rev 3, or 4882AR Series) control panel.
- **12.0a** — This is the first version of software to support the Ultrix Acuity switcher in the Ultrix FR12 frame.
- **11.2a** — If you downgrade from 11.2a, or later, you must also downgrade Ultrix™ from to 5.0.0, or later. Ultrix™ 5.0.0, or higher, requires Acuity® 11.2a or higher.
- **11.2a** — If you downgrade from 11.2a, or later, you must ensure that the SDPE blades are in the proper slots. The system will only look for the blades in slots 1, 3, 5, and 7.
- **11.1a** — If you downgrade from 11.1a, or later, you must also downgrade Ultrix™ from

to 4.8.0, or later. Ultrix™ 4.8.0, or higher, requires Acuity® 11.1a or higher.

- **11.0a** — If you downgrade from 11.0a, or later, you will not be able to connect to the TouchDrive (HW Rev 2) control panel.
- **10.1d** — If you are downgrading from 10.1d, or later, ensure that the Acuity CPU is compatible with the version of software you are installing. Check the Hardware Compatibility section for more information.
- **10.0a** — This is the first version of software to support the Ultrix Acuity switcher in the Ultrix FR5 frame.

Hardware Compatibility

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

Table 3: Hardware Compatibility

Version	Hardware
13.0a or higher	• TouchDrive 3 and 4 panels.
12.0a or higher	• 2101AR-600 — Ultrix FR12
10.1d or higher	• 4842AR-011-01 — Acuity CPU
10.0a or higher	• 2101AR-500-01B — Ultrix FR5 • 4842AR-010-03 — Acuity CPU • 4842AR-001-05A — Software Defined Production Engine (SDPE)

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 > Destination / 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 and blades are in a known state, and are ready to accept an 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.

Performing the Upgrade

The switcher and router are upgraded separately. Refer to the documentation that came with your Ultrix™ router for information on upgrading it.

To Upgrade the Switcher Software

The files you need for the upgrade depend on the hardware you are upgrading:

- **Ultrix Acuity** —
frame4-<version>-<build>.tgz
- **TouchDrive (HW Rev 2)(Qseven®)** —
panel4-<version>-<build>.tgz
- **TouchDrive (HW Rev 3)(AMD Ryzen™)** —
panel36-<version>-<build>.tgz
- **TouchDrive (4882AR Series)(AMD Ryzen™)** —
panel36-<version>-<build>.tgz

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 **frame** upgrade package file you want to upload to the switcher on your computer.
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**. This will be to add the matching panel upgrade file.
9. Locate the **Panel** upgrade package file you want to upload to the switcher on your computer.

Note: You must select the correct Panel file for the hardware revision of TouchDrive panel you have. If you need to support multiple hardware revisions of panels you can add an additional Panel file later. Refer to [To Add a Panel File](#) on page 9 for more information.

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**.

- Wait while the switcher uploads the file. This may take a few minutes.

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.

- If you have an additional panel file to upload, click **Open/Choose** to select the file.



Important: If you are upgrading from a version before 12.0a, you must add the second panel file manually. Refer to [To Add a Panel File](#) on page 9.

Note: If you do not have a second panel file to upload, click **Skip This File/Step** to proceed with the upgrade.

- Click **Add This File**.
- Wait while the switcher uploads the software. This may take a few minutes.

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.

- Click **Confirm Upgrade** to perform the upgrade and 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.

- Allow the switcher to propagate the upgrade to all the blades. A timer is shown to indicate how long to wait before checking the status page.

- 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 4: 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 .

To Add a Panel File

Add a second panel file to the switcher to support multiple panel hardware revisions.

Note: If you are upgrading from 12.1a, or higher, you can add the additional panel file during the normal upgrade procedure.

- 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**.
- Click **Upgrade**.

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

3. Select the software version and build currently installed on the switcher that you want to add a Panel file to.

*Tip: The Panel files that are currently included with a software build are listed in the **Other Files** column.*

4. Click on the "-" (dash) between **Upgrade selected version** and **Delete selected version** to show the **Advanced Options** section.
5. Select **Add/Replace Additional Files**.
6. Click **Upgrade selected version**.
7. Click **Choose File**.
8. Locate the other **Panel** upgrade package file you want to upload to the switcher on your computer.
9. 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.

10. Click **Add This File**.

Restoring the Switcher After the Upgrade

Once the upgrade is complete, you can restore your switcher registers.

Upgrading Satellite Panels

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