



R E L E A S E   N O T E S

# .AV Framework

CP4/CP4N, PRO4, AV4, MC4, RMC3/4, MPC3, VC-4,  
DIN-AP4, DMPS

Version 6.2200.1234

## Product or Content Description

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**Zip File containing .AV Framework for CP4/CP4N, PRO4, AV4, RMC3/4, MPC3, DIN-AP4, VC-4**

Package contents:

Program File: AVFPlugin 6.2200.1234.cpz

TSW Project: AVF\_UI\_1052\_6.2200.1234.vtz or AVF2.0\_UI\_TS\_6.2200.1234.vtz

DGE Project: AVF\_UI\_DGE\_6.2200.1234.vtz

Web XPanel interface files (AVFDSPanelUI1.zip or  
AVFDSPanelUI2.zip)

Configuration page files (index.zip) - Only required for VC-4.

### DMPS Firmware Files

**A DMPS firmware release for 6.21 is not available. Please load the cpz file to Program Slot-1.**

**For additional information on upgrading a DMPS, see the Operational Installation/Upgrade Instructions section below.**

## System Requirements and Dependencies

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### Firmware Requirements:

- 3-Series should use 3-Series firmware 1.8000.xxxx or higher.
- **4-Series should use 4-Series firmware 2.7000.00040.15 or higher in order to have .AV Framework part of Program 0.**
- VC-4 should use firmware 2.000.3877.18259 or later.
- MPC3-201 or 302 should use 3-Series firmware 1.503.0055 or later.
- MPC3-101 or 102 should use 3-Series firmware 1.600.0092 or later.
- DMPS3-4K-350/250/300/200 should use firmware 2.0300.0022 or later.

- DMPS3-4K-150 should use firmware 1.040.0024 or later.
- HD-PS402/621/622 should use firmware 1.4.4790.00038 or later.
- HD-PS421 switchers should use firmware 1.0000.1037 or later.
- DM-NVX should use firmware 5.1.4651.00031 or later.
- HD-MD4X1/4X2/4X4/8X4/8X8-4KZ-E should use firmware version 1.2.4671.00060 or later

## Operational Installation/Upgrade Instructions

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### CP4/CP4N, AV4, MC4, RMC3/4, MPC3, DIN-AP4, PRO4

If you are already using .AV Framework in Slot-1 of your control system and want to continue using Slot-1, the upgrade steps are:

- Use Toolbox to load the CPZ to the control system.
- [Optionally] Use Toolbox to load the VTZ to the Touch screen.

Configuration is done from a web browser by accessing the following URL:

[https://<ip\\_address>/AVF/index.html](https://<ip_address>/AVF/index.html).

If the intent is to use .AV Framework in Program Slot-0 and there is an existing .AV Framework application running in Program Slot-1, please review **Appendix G: Upgrade to .AV Framework 6.14 (and later) from an Older Version** in the .AV Framework Users Guide.

### DMPS

Please make sure all hardware in the system has been updated to required firmware versions prior to installing .AV Framework.

.AV Framework is now included with the firmware PUF file for the DMPS and is automatically installed into Program Slot-1.

The firmware file for the DMPS **DOES NOT** have support for the AVF 1.0 Web Xpanel. If you need support for Web Xpanel 1.0, you must load the AVF .CPZ to Program Slot-1 of the DMPS. **If you need to load a firmware file to resolve a bug in the DMPS chassis AND you need support for Web Xpanel 1.0, you can load the AVF .CPZ application file after the firmware installation.**

Configuration is done from a web browser by accessing the following URL:

[https://<ip\\_address>/AVF/index.html](https://<ip_address>/AVF/index.html).

### DM-DGE-200

AVF\_UI\_DGE\_v6.2200.1234.vtz (Version 1) or AVF2.0\_UI\_TS\_v6.2200.1234.vtz (Version 2.0) should be loaded to the DM-DGE-200-C custom project.

## Crestron Virtual Control Server (VC-4)

To upload the .AV Framework program to the Crestron Virtual Control server:

1. Enter "https://[ServerURL]/VirtualControl/config/settings/" into a supported web browser, where [ServerURL] is the IP address or hostname of the Linux® software platform where the Crestron Virtual Control service is installed.
2. Select Add Program ... from the Actions drop-down menu on the top-right of the configuration utility.
3. Enter a user-defined name for the program and a description (optional) in the appropriate text field.
4. Click Choose, navigate to the extracted package file contents on the network, and select the6.2200.1234.cpz program file
5. Click Next
6. Click Choose next to a file type to select the necessary .AV Framework program file and click Upload to upload the file to the program. The following files must be uploaded:
  - a. For XPanel (Web), select and upload the correct .zip file.
    - i AVFDSPanelUI1.zip for UI version 1.
    - ii AVFDSPanelUI2.zip for UI version 2.
  - b. For Configuration Pages, select and upload the index.zip file.
  - c. For TSW Project, select and upload the AVF\_UI\_1052\_v6.2200.1234.vtz (Version 1.0) or AVF2.0\_UI\_TS\_v6.2200.1234.vtz (Version 2.0) file.
7. Click Add. The program files are added to the server.

For more detailed information about installing AV Framework on Virtual Control, see the AV Framework for Crestron Virtual Control Operations Guide.

## Version History

### Version Date

6.2200.1234 9/27/2022

Uses Crestron Drivers SDK v16

### Changes since Last Version

#### New Features

- Add Support for connection to Display and Projector Drivers via Hostname.

#### Fixed Issues

- Fixed "Invalid Token" issue when trying to access configuration pages in VC4 environment.
- Internal Bug Fixes

#### Known Issues/Limitations – General

- TSW Panel Projects are not loading from the VC4 program when using the Dell NUC. Use one of the options below

- Manually load the .vtz to the touchscreen
  - Do not load the .vtz project to the VC4 program library and let AVF auto update the touchscreen.
- **Saving changes to the "Custom Help" field no longer requires activation, but activation pop-up still present. This will be addressed in a future build of AVF**
- **After switching an AVF route with Mute asserted, the Epson mute was cleared but the TSW mute icon remains. This is an behavior of the projector when muted and input is switched.**
- Configuration web pages are not updating properly when using Chrome with a 3-Series control system.
  - Until this issue is resolved, Crestron recommends using Firefox or Edge when configuring an .AV Framework system.
- As of .AV Framework version 6.19, you must enable PAM authentication and SSL when using .AV Framework on VC-4 (Virtual Control).
- When upgrading .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an "Invalid User/Password" message on the configuration webpage login.
- When updating from .AV Framework 6.14 and lower, the control system firmware may corrupt the new .AV Framework splash page, preventing users from opening the .AV Framework configuration page.
  - To correct the issue, manually delete the index.html page from the HTML folder and re-install .AV Framework.
- The .AV Framework configuration page displays "online", even when connection to the control system is lost.
- .AV Framework screensaver is not loading when the system is running in secure mode.
  - To work around the issue, either configure the touch panel to use its own screen saver or disable authentication in the touch panel connection to the control system.
- After idle logoff, AVF configuration drop-downs were missing from Dashboard after reentering credentials. Refresh the page to correct.
- Warning message displays every selection of routes on the touch panel if the display is not connected to the control system.
  - To correct the issue, ensure the display is communicating with .AV Framework.
- 3-Series: User set to "Connect-only" Access Level cannot access AVF config pages.
- VC-4: Panel projects are not automatically pushed to the touch panel from a the VC-4 server.
  - This will be fixed in the future with a firmware update for the touch panels.
  - The work around the issue, users can manually load the .AV Framework project on to the touch panel(s).

#### **Conferencing (Zoom) Related**

- "Conference Video" output is allowed to be assigned to a switcher VGA input, even though the conference hardware only supports HDMI inputs.
- After deleting and re-adding the Zoom driver, the previous Zoom "Auto" routing mode values in the AV Routing configuration remains, even though adding the Zoom driver reset the routing mode to "Manual".
  - To clear the AV Routing values, toggle the Zoom routing mode between Auto and Manual.

#### **Driver Related**

- **Video Server appears as a device that can be added to the system despite not having a applicable control point.**

- Mute can get “stuck” when using the Samsung DME32 driver. This is a known issue with the tv.
  - Toggle the mute again to correct the issue.

#### **NVX Related**

- 4K sources connected to E10/E20 NVX requires setting HDCP to 1.4 when streaming to 1080p displays.
- When using the NVX analog audio output, pressing mute will mute both the analog audio output and the flat panel display.
- .AV Framework allows default input to be applied to an NVX device set as a receiver that is not the primary display.
- NVX implementation allows adding Dante audio from an NVX device defined as a receiver to be used as an audio source for paging and breakaway audio, even though it is not supported.
- If one NVX device goes offline, the input status of other NVX devices also shows as offline.
- When using **local inputs** on NVX hardware **configured as receivers and** multiple displays have been configured, selecting the local input will cause the touch panel to display incorrect routing status.

#### **HD-PS Related**

- When two displays are configured on the HD-PS622 and each has a different source routed, the analog audio will play the last selected source but the audio associated with the video output will reflect the selected source.

#### **HD-MD Related**

- CEC control is not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- HD-MD402 I/O status on the .AV Framework webpage dashboard does not update properly after a power cycle.
- External System Trigger and Paging is not available for the HD-MD402/421.
- RS-232 and digital I/O are not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.

#### **HD-RX Related**

- There is a delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.
- When the switcher is an HD-RX-210 and configured as follows (Controlled audio output: “display”, Analog audio output: “disabled”), the analog volume slider of the HD-RX-210 is still visible and can be modified even though it does not apply.

#### **DM-MD Related**

- The DM-MD(n)X(n)-4KZ switchers do not support break-away audio on the HDMI outputs. In a multi-display system using multiple HDMI outputs, the volume settings must be configured properly to prevent multiple audio sources from playing at the same time.
- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.

#### **TX Related**

- **HD-TX-4K-301 is not set to auto by default when connected to an HD-RX-4K-510 switcher**
  - **Set the HD-TX-301 endpoints to “auto” manually.**
- Audio cannot be heard from the analog input on the HD-TX-201-C-2G-E when no VGA signal is present.
  - This is a firmware problem with the HD-TX-201-C-2G-E and will be addressed in a future firmware release.

#### **RX Related**

- Resolution/display mode settings for the DM-RMC-4KZ scaler may not be set correctly from .AV Framework.
  - This is a hardware issue that will be corrected in a future firmware update.

#### **Calendaring Related**

- Cancelling the registration process for a Google calendar before it completes, will cause the registration state to get stuck for 20-25 minutes.
  - This is a known issue with the Google calendar registration process. Once a process is started and cancelled before completion, it takes 20-25 minutes before Google cancels the session.
- Unexpected popup when navigating away from Fusion configuration page when using Firefox. Users simply need to close the popup.
- Google allows registration with an invalid calendar Id.
  - This is a limitation with the Google registration process. Users will need to re-register with a valid calendar Id.
- When using native Microsoft O365 calendaring, losing power before the configuration values have been set, may cause the values to not be stored.
  - Users simply have to re-enter the values again in .AV Framework.
- Switching from Fusion calendaring to native O365 may not actually switch the calendaring to O365 after .AV Framework restarts.
  - This is an intermittent issue, but the work around is to toggle the “Enable Crestron Fusion Scheduling” on and off a couple of times.
- After native O365 scheduling has been enabled, downgrading to .AV Framework 6.14 (or earlier) will persist the connection to O365.
  - User must manually clear the O365 configuration prior to downgrading to 6.14.
- It can take up to 5 minutes before calendar events are removed from the .AV Framework user interface after events are deleted from the room’s calendar or Fusion has been disabled.
  - This is by-design due to the polling rate of 5 minutes.
- When using Fusion on-prem with the RMC4, you must enable the cloud connection and use the cloud URL to connect to your on-prem Fusion server.

#### **CEC Related**

- AirMedia3K CEC default display input selection is intermittent.
  - Users simply need to re-select the source for the display when it happens.
- CEC control of Sony KD-55X720E does not work.
- CEC control is intermittent for Apple 4K TV when using it with the HD-TX-301-C-2G.
  - This is a firmware issue in the transmitter and will be addressed in a firmware update.

#### DMPS Related

- DMPS: After a factory restore, .AV Framework may report puf = unknown. To recover, re-install the desired puf file.
- DMPS: If the existing .AV Framework application was loaded using the .CPZ, loading a new .PUF may overwrite the existing .AV Framework application, even if the .CPZ is newer.
- DMPS: No error message displays after clicking the cancel button from the Sign in pop up.
- DMPS: After attempting to navigate various web pages, Web pages updates are slow, incomplete, or start timing out. This is an intermittent issue and eventually goes away.

#### Crestron One

- See the previous release notes for known issues with Crestron One.

#### HTML5 (CH5)

- AirMedia 3K: Disconnected page starts to display on touch panel after power outage. To recover, reboot the AirMedia 3K again.
- Room does not power on when occupancy is triggered via an occ sensor.
- Intermittent issue: Touch panel stuck on the "Please wait for initialization screen" after changing the theme from 1.0 smart graphics to ch5.
- Wrong icon displays with Resume button for AirMedia source.
- Panel stuck on "Please wait for system to initialize" on VC-4 system. CH5 is not supported when AVF is running on VC-4.

See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.2100.1046 8/16/2022

Uses Crestron Drivers SDK v15.0.4.0

## Changes since Last Version

### New Features

- Add support for HDMI & USB-C Multi-Input DM Lite Transmitters.

### Fixed Issues

- AVF\_6.12-ch5Shell-Able to configure the webX panel while user interface theme is CH5.
- Calendar available is not updating properly on new modern authentication code
- PRO4-SNTP set to off toggles back to on when saved
- Unable to scroll through sources on CH5 Webx with multiple columns and/or sources greater than 4 or >5 for a single ribbon (side to side)

### Known Issues/Limitations – General

- **Saving changes to the "Custom Help" field no longer requires activation, but activation pop-up still present. This will be addressed in a future build of AVF**

- **After switching an AVF route with Mute asserted, the Epson mute was cleared but the TSW mute icon remains. This is an behavior of the projector when muted and input is switched.**
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See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.2000.0876 7/15/2022

## Changes since Last Version

### New Features

- Added support for serial drivers on HDBaseT switcher ports.
  - Initial support is only for HD-PS switchers.
- Added support for DM-NUX USB extenders.
  - Initial support is only for NVX switchers.

### Fixed Issues

- Display warning message shows every time a source is selected when there is a communication issue with the display.
- Ramping display volume is causing errors to be logged into the .AV Framework logs.
- When using NVX, if EST Mute is asserted after active paging, the paging announcement is cleared but the "Mute" is not asserted.
- Screen saver is not appearing on CH5 touch panel theme.

### Known Issues/Limitations – General

- **Configuration web pages are not updating properly when using Chrome with a 3-Series control system.**
  - **Until this issue is resolved, Crestron recommends using Firefox or Edge when configuring an .AV Framework system.**

- **As of .AV Framework version 6.19, you must enable PAM authentication and SSL when using .AV Framework on VC-4 (Virtual Control).**
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#### **DM-MD Related**

- The DM-MD(n)X(n)-4KZ switchers do not support break-away audio on the HDMI outputs. In a multi-display system using multiple HDMI outputs, the volume settings must be configured properly to prevent multiple audio sources from playing at the same time.
- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.

#### **TX Related**

- Audio cannot be heard from the analog input on the HD-TX-201-C-2G-E when no VGA signal is present.
  - This is a firmware problem with the HD-TX-201-C-2G-E and will be addressed in a future firmware release.

#### **RX Related**

- Resolution/display mode settings for the DM-RMC-4KZ scaler may not be set correctly from .AV Framework.
  - This is a hardware issue that will be corrected in a future firmware update.

#### **Calendaring Related**

- Cancelling the registration process for a Google calendar before it completes, will cause the registration state to get stuck for 20-25 minutes.
  - This is a known issue with the Google calendar registration process. Once a process is started and cancelled before completion, it takes 20-25 minutes before Google cancels the session.
- Unexpected popup when navigating away from Fusion configuration page when using Firefox. Users simply need to close the popup.
- Google allows registration with an invalid calendar Id.
  - This is a limitation with the Google registration process. Users will need to re-register with a valid calendar Id.
- When using native Microsoft O365 calendaring, losing power before the configuration values have been set, may cause the values to not be stored.
  - Users simply have to re-enter the values again in .AV Framework.
- Switching from Fusion calendaring to native O365 may not actually switch the calendaring to O365 after .AV Framework restarts.
  - This is an intermittent issue, but the work around is to toggle the “Enable Crestron Fusion Scheduling” on and off a couple of times.
- After native O365 scheduling has been enabled, downgrading to .AV Framework 6.14 (or earlier) will persist the connection to O365.
  - User must manually clear the O365 configuration prior to downgrading to 6.14.
- It can take up to 5 minutes before calendar events are removed from the .AV Framework user interface after events are deleted from the room’s calendar or Fusion has been disabled.
  - This is by-design due to the polling rate of 5 minutes.
- When using Fusion on-prem with the RMC4, you must enable the cloud connection and use the cloud URL to connect to your on-prem Fusion server.

#### **CEC Related**

- AirMedia3K CEC default display input selection is intermittent.
  - Users simply need to re-select the source for the display when it happens.
- CEC control of Sony KD-55X720E does not work.
- CEC control is intermittent for Apple 4K TV when using it with the HD-TX-301-C-2G.
  - This is a firmware issue in the transmitter and will be addressed in a firmware update.

#### **DMPS Related**

- DMPS: After a factory restore, .AV Framework may report puf = unknown. To recover, re-install the desired puf file.
- DMPS: If the existing .AV Framework application was loaded using the .CPZ, loading a new .PUF may overwrite the existing .AV Framework application, even if the .CPZ is newer.
- DMPS: No error message displays after clicking the cancel button from the Sign in pop up.
- DMPS: After attempting to navigate various web pages, Web pages updates are slow, incomplete, or start timing out. This is an intermittent issue and eventually goes away.

#### **Crestron One**

- See the previous release notes for known issues with Crestron One.

#### **HTML5 (CH5)**

- AirMedia 3K: Disconnected page starts to display on touch panel after power outage. To recover, reboot the AirMedia 3K again.
- Room does not power on when occupancy is triggered via an occ sensor.
- Intermittent issue: Touch panel stuck on the "Please wait for initialization screen" after changing the theme from 1.0 smart graphics to ch5.
- Wrong icon displays with Resume button for AirMedia source.
- Panel stuck on "Please wait for system to initialize" on VC-4 system. CH5 is not supported when AVF is running on VC-4.

See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.1900.0728 5/20/2022

## Changes since Last Version

### New Features

- Added support for third-party driver registration in XiO Cloud.
  - When third-party drivers are configured in .AV Framework, claiming the control system will register the third-party devices so they can be monitored and controlled.
- Added support for CH5 Web Xpanel for all control systems.
  - Support for this requires the mobility license on the control system.
  - VC-4 already supports this and has a free mobility license.
- Added support for a notification and status dialog on the configuration pages.

### Fixed Issues

- Connections to O365 when using the native calendaring feature on 3-Series control systems are intermittent.
- Triggering the paging input quickly could get the display volume stuck in the mute state.
- DMP53-4K-150 endpoints remain offline in .AV Framework after firmware update.
- Paging source and volume bar occasionally missing from the configuration page until a refresh is issued.

### Known Issues/Limitations – General

- **Web pages are not updating properly when using Chrome with a 3-Series control system.**
  - **Until this issue is resolved, Crestron recommends using Firefox or Edge when configuring an .AV Framework system.**
- **As of .AV Framework version 6.19, you must enable PAM authentication and SSL when using .AV Framework on VC-4 (Virtual Control).**
- When upgrading .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an "Invalid User/Password" message on the configuration webpage login.
- When updating from .AV Framework 6.14 and lower, the control system firmware may corrupt the new .AV Framework splash page, preventing users from opening the .AV Framework configuration page.
  - To correct the issue, manually delete the index.html page from the HTML folder and re-install .AV Framework.

- The .AV Framework configuration page displays “online”, even when connection to the control system is lost.
- .AV Framework screensaver is not loading when the system is running in secure mode.
  - To work around the issue, either configure the touch panel to use its own screen saver or disable authentication in the touch panel connection to the control system.
- After idle logoff, AVF configuration drop-downs were missing from Dashboard after reentering credentials. Refresh the page to correct.
- Warning message displays every selection of routes on the touch panel if the display is not connected to the control system.
  - To correct the issue, ensure the display is communicating with .AV Framework.
- 3-Series: User set to "Connect-only" Access Level cannot access AVF config pages.
- VC-4: Panel projects are not automatically pushed to the touch panel from a the VC-4 server.
  - This will be fixed in the future with a firmware update for the touch panels.
  - The work around the issue, users can manually load the .AV Framework project on to the touch panel(s).

#### **Conferencing (Zoom) Related**

- “Conference Video” output is allowed to be assigned to a switcher VGA input, even though the conference hardware only supports HDMI inputs.
- After deleting and re-adding the Zoom driver, the previous Zoom “Auto” routing mode values in the AV Routing configuration remains, even though adding the Zoom driver reset the routing mode to “Manual”.
  - To clear the AV Routing values, toggle the Zoom routing mode between Auto and Manual.

#### **Driver Related**

- Mute can get “stuck” when using the Samsung DME32 driver. This is a known issue with the tv.
  - Toggle the mute again to correct the issue.

#### **NVX Related**

- 4K sources connected to E10/E20 NVX requires setting HDCP to 1.4 when streaming to 1080p displays.
- When using the NVX analog audio output, pressing mute will mute both the analog audio output and the flat panel display.
- When using NVX, if EST Mute is asserted after active paging, the paging announcement is cleared but the “Mute” is not asserted.
- .AV Framework allows default input to be applied to an NVX device set as a receiver that is not the primary display.
- NVX implementation allows adding Dante audio from an NVX device defined as a receiver to be used as an audio source for paging and breakaway audio, even though it is not supported.
- If one NVX device goes offline, the input status of other NVX devices also shows as offline.
- When using **local inputs** on NVX hardware **configured as receivers and** multiple displays have been configured, selecting the local input will cause the touch panel to display incorrect routing status.

#### **HD-PS Related**



- When two displays are configured on the HD-PS622 and each has a different source routed, the analog audio will play the last selected source but the audio associated with the video output will reflect the selected source.

#### **HD-MD Related**

- CEC control is not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- HD-MD402 I/O status on the .AV Framework webpage dashboard does not update properly after a power cycle.
- External System Trigger and Paging is not available for the HD-MD402/421.
- RS-232 and digital I/O are not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.

#### **HD-RX Related**

- There is a delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.
- When the switcher is an HD-RX-210 and configured as follows (Controlled audio output: “display”, Analog audio output: “disabled”), the analog volume slider of the HD-RX-210 is still visible and can be modified even though it does not apply.

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- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.

#### **TX Related**

- Audio cannot be heard from the analog input on the HD-TX-201-C-2G-E when no VGA signal is present.
  - This is a firmware problem with the HD-TX-201-C-2G-E and will be addressed in a future firmware release.

#### **RX Related**

- Resolution/display mode settings for the DM-RMC-4KZ scaler may not be set correctly from .AV Framework.
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#### **Calendaring Related**

- Cancelling the registration process for a Google calendar before it completes, will cause the registration state to get stuck for 20-25 minutes.
  - This is a known issue with the Google calendar registration process. Once a process is started and cancelled before completion, it takes 20-25 minutes before Google cancels the session.

- Unexpected popup when navigating away from Fusion configuration page when using Firefox. Users simply need to close the popup.
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#### **CEC Related**

- AirMedia3K CEC default display input selection is intermittent.
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- Wrong icon displays with Resume button for AirMedia source.
- Panel stuck on "Please wait for system to initialize" on VC-4 system. CH5 is not supported when AVF is running on VC-4.
- See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.1800.0603 4/8/2022

## Changes since Last Version

### New Features

- Added a "More" button in the "Import from Cloud" driver management dialog to show additional information about drivers.
- Added support for Zoom server starting port in VC-4.
  - See the .AV Framework VC-4 Users Manual for additional information on how to use this feature.
- Improved support for Zoom Custom Room controls.
  - Routing the Crestron UC-Engine output to the display automatically happens when a meeting is active.
  - Video loop of UC-Engine output to UC-Engine input prevented.

### Fixed Issues

- Zoom support does not work with VC-4.
- Keypad controls for Blu-Ray and Cable Box devices are not shown in the Zoom Room App when using Zoom "Room Controls".
- After a power cycle on the HD-MD421, the device can lose its original IP address, causing a communication loss with .AV Framework. Users should configure the device with a static ip address or DHCP reservation.
  - This requires HD-PS firmware 1.0000.1037 or later.
- CEC TV connected to HD-MD8x8-4KZ-E shuts down when route is cleared.
  - This requires HD-MD8x8-4KZ-E firmware version 1.2.4671.00060 or later.

### Known Issues/Limitations – General

- **Connections to O365 when using the native calendaring feature on 3-Series control systems are intermittent.**
  - **Until this issue is resolved, Crestron recommends using Fusion for O365 calendaring on a 3-Series.**
- **Web pages are not updating properly when using Chrome with a 3-Series control system.**
  - **Until this issue is resolved, Crestron recommends using Firefox or Edge when configuring an .AV Framework system.**

- When upgrading .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an “Invalid User/Password” message on the configuration webpage login.
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- When using **local inputs** on NVX hardware **configured as receivers and** multiple displays have been configured, selecting the local input will cause the touch panel to display incorrect routing status.

#### **HD-PS Related**

- When two displays are configured on the HD-PS622 and each has a different source routed, the analog audio will play the last selected source but the audio associated with the video output will reflect the selected source.

#### **HD-MD Related**

- CEC control is not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- HD-MD402 I/O status on the .AV Framework webpage dashboard does not update properly after a power cycle.
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#### **HD-RX Related**

- There is a delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.
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#### **TX Related**

- Audio cannot be heard from the analog input on the HD-TX-201-C-2G-E when no VGA signal is present.
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- After native O365 scheduling has been enabled, downgrading to .AV Framework 6.14 (or earlier) will persist the connection to O365.
  - User must manually clear the O365 configuration prior to downgrading to 6.14.
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- Panel stuck on "Please wait for system to initialize" on VC-4 system. CH5 is not supported when AVF is running on VC-4.
- See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.1700.0454 3/4/2022

## Changes since Last Version

### New Features

- Added support for native Exchange on-prem calendaring for all control systems.
- Added support for native Google calendaring for all control systems.
- Integrated native driver portal support which allows selected drivers to be used without having to import them.

### Fixed Issues

- IR port on the control system is not available if the switcher model added is the HD-PS401.
- CH5: After a network outage on the touch panel, the currently routed source is not displaying on the touch panel. The user must re-select the source to see the controls again.

### Known Issues/Limitations - General

- **Web pages are not updating properly when using Chrome with a 3-Series control system.**
  - **Until this issue is resolved, Crestron recommends using Firefox or Edge when configuring an .AV Framework system.**
- When upgrading .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an "Invalid User/Password" message on the configuration webpage login.
- When updating from .AV Framework 6.14 and lower to .AV Framework 6.16, the control system firmware may corrupt the new .AV Framework splash page, preventing users from opening the .AV Framework configuration page.
  - To correct the issue, manually delete the index.html page from the HTML folder and re-install .AV Framework 6.16.
- The .AV Framework configuration page displays "online", even when connection to the control system is lost.
- .AV Framework screensaver is not loading when the system is running in secure mode.
  - To work around the issue, either configure the touch panel to use its own screen saver or disable authentication in the touch panel connection to the control system.
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#### **HD-PS Related**

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- CEC control is not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
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- After native O365 scheduling has been enabled, downgrading to .AV Framework 6.14 (or earlier) will persist the connection to O365.
  - User must manually clear the O365 configuration prior to downgrading to 6.14.
- It can take up to 5 minutes before calendar events are removed from the .AV Framework user interface after events are deleted from the room’s calendar or Fusion has been disabled.
  - This is by-design due to the polling rate of 5 minutes.
- When using Fusion on-prem with the RMC4, you must enable the cloud connection and use the cloud URL to connect to your on-prem Fusion server.

### **CEC Related**

- AirMedia3K CEC default display input selection is intermittent.
  - Users simply need to re-select the source for the display when it happens.
- CEC control of Sony KD-55X720E does not work.
- CEC control is intermittent for Apple 4K TV when using it with the HD-TX-301-C-2G.
  - This is a firmware issue in the transmitter and will be addressed in a firmware update.

### **DMPS Related**

- DMPS: After a factory restore, .AV Framework may report puf = unknown. To recover, re-install the desired puf file.
- DMPS: If the existing .AV Framework application was loaded using the .CPZ, loading a new .PUF may overwrite the existing .AV Framework application, even if the .CPZ is newer.
- DMPS: No error message displays after clicking the cancel button from the Sign in pop up.
- DMPS: After attempting to navigate various web pages, Web pages updates are slow, incomplete, or start timing out. This is an intermittent issue and eventually goes away.

### **Crestron One**

- See the previous release notes for known issues with Crestron One.

### HTML5 (CH5)

- AirMedia 3K: Disconnected page starts to display on touch panel after power outage. To recover, reboot the AirMedia 3K again.
- Room does not power on when occupancy is triggered via an occ sensor.
- Intermittent issue: Touch panel stuck on the "Please wait for initialization screen" after changing the theme from 1.0 smart graphics to ch5.
- Wrong icon displays with Resume button for AirMedia source.
- Panel stuck on "Please wait for system to initialize" on VC-4 system. CH5 is not supported when AVF is running on VC-4.
- See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.1601.0309 1/21/2022

## Changes since Last Version

### New Features

- Added support for native Microsoft O365 calendaring for all control systems.
  - Previous .AV Framework release only supported DMPS3-4K-250C/350.
- Improved the driver import workflow.

### Fixed Issues

- CEC source control is not supported on the AirMedia 3K but users can still install the Apple CEC driver.
- If a route is made while the HD-PS402 is not connected to the control system, the HD-PS402 will not sync with .AV Framework and update the route.
- RMC3 log filled with data aborts when using it with an HD-PS621.
- CH5: When there are multiple displays, the source list column borders are the same height, regardless of how many sources are in each display list.
- .AV Framework must be restarted after a Zoom routing change.
- CH5: Progress spinner does not display on the touch panel.

### Known Issues/Limitations - General

- **Web pages are not updating properly when using Chrome with a 3-Series control system.**
  - **Until this issue is resolved, Crestron recommends using Firefox or Edge when configuring an .AV Framework system.**
- IR port on the control system is not available if the switcher model added is the HD-PS401.
  - To work around the issue, restart .AV Framework.
- Switching from Fusion calendaring to native O365 may not actually switch the calendaring to O365 after .AV Framework restarts.
  - This is an intermittent issue, but the work around is to toggle the "Enable Crestron Fusion Scheduling" on and off a couple of times.
- After native O365 scheduling has been enabled, downgrading to .AV Framework 6.14 (or earlier) will persist the connection to O365.
  - User must manually clear the O365 configuration prior to downgrading to 6.14.

- CEC control of Sony KD-55X720E does not work.
- CEC control is intermittent for Apple 4K TV when using it with the HD-TX-301-C-2G.
  - This is a firmware issue in the transmitter and will be addressed in a firmware update.
- When using native Microsoft O365 calendaring, losing power before the configuration values have been set, may cause the values to not be stored.
  - Users simply have to re-enter the values again in .AV Framework.
- Resolution/display mode settings for the DM-RMC-4KZ scaler may not be set correctly from .AV Framework.
  - This is a hardware issue that will be corrected in a future firmware update.
- It can take up to 5 minutes before calendar events are removed from the .AV Framework user interface after events are deleted from the room's calendar or Fusion has been disabled.
  - This is by-design due to the polling rate of 5 minutes.
- The .AV Framework configuration page displays "online", even when connection to the control system is lost.
- .AV Framework screensaver is not loading when the system is running in secure mode.
  - To work around the issue, either configure the touch panel to use its own screen saver or disable authentication in the touch panel connection to the control system.
- When using the NVX analog audio output, pressing mute will mute both the analog audio output and the flat panel display.
- Keypad controls for Blu-Ray and Cable Box devices are not shown in the Zoom Room App when using Zoom "Room Controls".
- Audio cannot be heard from the analog input on the HD-TX-201-C-2G-E when no VGA signal is present.
  - This is a firmware problem with the HD-TX-201-C-2G-E and will be addressed in a future firmware release.
- When two displays are configured on the HD-PS622 and each has a different source routed, the analog audio will play the last selected source but the audio associated with the video output will reflect the selected source.
- When updating from .AV Framework 6.14 and lower to .AV Framework 6.16, the control system firmware may corrupt the new .AV Framework splash page, preventing users from opening the .AV Framework configuration page.
  - To correct the issue, manually delete the index.html page from the HTML folder and re-install .AV Framework 6.16.
- After idle logoff, AVF configuration drop-downs were missing from Dashboard after reentering credentials. Refresh the page to correct.
- Warning message displays every selection of routes on the touch panel if the display is not connected to the control system.
- When using NVX, if EST Mute is asserted after active paging, the paging announcement is cleared but the "Mute" is not asserted.
- .AV Framework allows default input to be applied to an NVX device set as a receiver that is not the primary display.
- NVX implementation allows adding Dante audio from an NVX device defined as a receiver to be used as an audio source for paging and breakaway audio, even though it is not supported.
- 3-Series: User set to "Connect-only" Access Level cannot access AVF config pages.
- MPC3: Wrong error message displays while saving the configuration on the AVF UI.

- DMPS: After a factory restore, .AV Framework may report puf = unknown. To recover, re-install the desired puf file.
- DMPS: If the existing .AV Framework application was loaded using the .CPZ, loading a new .PUF may overwrite the existing .AV Framework application, even if the .CPZ is newer.
- DMPS: No error message displays after clicking the cancel button from the Sign in pop up.
- DMPS: After attempting to navigate various web pages, Web pages updates are slow, incomplete, or start timing out. This is an intermittent issue and eventually goes away.
- After a power cycle on the HD-MD421, the device can lose its original IP address, causing a communication loss with .AV Framework. Users should configure the device with a static ip address or DHCP reservation.
- External System Trigger and Paging is not available for the HD-MD402/421.
- RS-232 and digital I/O are not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- CEC control is not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- HD-MD402 I/O status on the .AV Framework webpage dashboard does not update properly after a power cycle.
- When using Fusion on-prem with the RMC4, you must enable the cloud connection and use the cloud URL to connect to your on-prem Fusion server.
- The DM-MD(n)X(n)-4KZ switchers do not support break-away audio on the HDMI outputs. In a multi-display system using multiple HDMI outputs, the volume settings must be configured properly to prevent multiple audio sources from playing at the same time.
- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.
- If one NVX device goes offline, the input status of other NVX devices also shows as offline.
- When using **local inputs** on NVX hardware **configured as receivers and** multiple displays have been configured, selecting the local input will cause the touch panel to display incorrect routing status.
- When upgrading from .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an "Invalid User/Password" message on the configuration webpage login.
- There is a delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.
- When the switcher is an HD-RX-210 and configured as follows (Controlled audio output: "display", Analog audio output: "disabled"), the analog volume slider of the HD-RX-210 is still visible and can be modified even though it does not apply.

#### Known Issues/Limitations - Crestron One

- See the previous release notes for known issues with Crestron One.

#### Known Issues/Limitations - HTML5 (CH5)

- After a network outage on the touch panel, the currently routed source is not displaying on the touch panel. The user must re-select the source to see the controls again.
- AirMedia 3K: Disconnected page starts to display on touch panel after power outage. To recover, reboot the AirMedia 3K again.

- Room does not power on when occupancy is triggered via an occ sensor.
- Intermittent issue: Touch panel stuck on the "Please wait for initialization screen" after changing the theme from 1.0 smart graphics to ch5.
- Wrong icon displays with Resume button for AirMedia source.
- Panel stuck on "Please wait for system to initialize" on VC-4 system. CH5 is not supported when AVF is running on VC-4.
- See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.15.00.055 12/10/2021

## Changes since Last Version

### New Features

- Added support for DM-RMC-4K100/100C1G for HD-PS621/622 switcher.
- Added support for DM-RMC-4K-100/100C1G for HD-PS401/402 switcher.
- Added support for native Microsoft O365 calendaring for DMPS3-4K-250C/350.
- Added support for Crestron driver framework Version 11.
- Added support for DM-NVX-200.

### Fixed Issues

- Fixed issue where Fusion on-prem was not connecting to .AV Framework when running on program Slot-0 (4-Series only).
- Fixed issue where the .AV Framework web UI does not show first boot login after a restore.
- Fixed transmitter model name consistency in HD-PS621/622 and HD-PS401/402 drop-down lists when configuring the switchers.
- Fixed issue where AirMedia not connected page displays instead of AirMedia presenting page on the touch panel while AirMedia is connected.

### Known Issues/Limitations - General

- **Web pages are not updating properly when using Chrome with a 3-Series control system.**
  - **Until this issue is resolved, Crestron recommends using Firefox or Edge when configuring an .AV Framework system.**
- CEC control of Sony KD-55X720E does not work.
- CEC control is intermittent for Apple 4K TV when using it with the HD-TX-301-C-2G.
  - This is a firmware issue in the transmitter and will be addressed in a firmware update.
- CEC source control is not supported on the AirMedia 3K but users can still install the Apple CEC driver.
- When using native Microsoft O365 calendaring, losing power before the configuration values have been set, may cause the values to not be stored.
  - Users simply have to re-enter the values again in .AV Framework.
- Resolution/display mode settings for the DM-RMC-4KZ scaler may not be set correctly from .AV Framework.
  - This is a hardware issue that will be corrected in a future firmware update.

- It can take up to 5 minutes before calendar events are removed from the .AV Framework user interface after events are deleted from the room's calendar or Fusion has been disabled.
  - This is by-design due to the polling rate of 5 minutes.
- The .AV Framework configuration page displays "online", even when connection to the control system is lost.
- If a route is made while the HD-PS402 is not connected to the control system, the HD-PS402 will not sync with .AV Framework and update the route.
  - The user must re-select the route once the HD-PS402 is connected to the control system again.
- .AV Framework screensaver is not loading when the system is running in secure mode.
  - To work around the issue, either configure the touch panel to use its own screen saver or disable authentication in the touch panel connection to the control system.
- When using the NVX analog audio output, pressing mute will mute both the analog audio output and the flat panel display.
- Audio cannot be heard from the analog input on the HD-TX-201-C-2G-E when no VGA signal is present.
  - This is a firmware problem with the HD-TX-201-C-2G-E and will be addressed in a future firmware release.
- When two displays are configured on the HD-PS622 and each has a different source routed, the analog audio will play the last selected source but the audio associated with the video output will reflect the selected source.
- RMC3 log filled with data aborts when using it with an HD-PS621.
  - This is a control system issue and will be addressed in the next release of .AV Framework.
- When updating from .AV Framework 6.14 and lower to .AV Framework 6.15, the control system firmware may corrupt the new .AV Framework splash page, preventing users from opening the .AV Framework configuration page.
  - To correct the issue, manually delete the index.html page from the HTML folder and re-install .AV Framework 6.15.
- After idle logoff, AVF configuration drop-downs were missing from Dashboard after reentering credentials. Refresh the page to correct.
- Warning message displays every selection of routes on the touch panel if the display is not connected to the control system.
- When using NVX, if EST Mute is asserted after active paging, the paging announcement is cleared but the "Mute" is not asserted.
- .AV Framework allows default input to be applied to an NVX device set as a receiver that is not the primary display.
- NVX implementation allows adding Dante audio from an NVX device defined as a receiver to be used as an audio source for paging and breakaway audio, even though it is not supported.
- 3-Series: User set to "Connect-only" Access Level cannot access AVF config pages.
- MPC3: Wrong error message displays while saving the configuration on the AVF UI.
- DMPS: After a factory restore, .AV Framework may report puf = unknown. To recover, re-install the desired puf file.
- DMPS: If the existing .AV Framework application was loaded using the .CPZ, loading a new .PUF may overwrite the existing .AV Framework application, even if the .CPZ is newer.
- DMPS: No error message displays after clicking the cancel button from the Sign in pop up.

- DMPS: After attempting to navigate various web pages, Web pages updates are slow, incomplete, or start timing out. This is an intermittent issue and eventually goes away.
- Keypad controls for Blu-Ray and Cable Box devices are not shown in the Zoom Room App when using Zoom “Room Controls”.
- .AV Framework must be restarted after a Zoom routing change.
- After a power cycle on the HD-MD421, the device can lose its original IP address, causing a communication loss with .AV Framework. Users should configure the device with a static ip address or DHCP reservation.
- External System Trigger and Paging is not available for the HD-MD402/421.
- RS-232 and digital I/O are not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- CEC control is not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- HD-MD402 I/O status on the .AV Framework webpage dashboard does not update properly after a power cycle.
- When using Fusion on-prem with the RMC4, you must enable the cloud connection and use the cloud URL to connect to your on-prem Fusion server.
- The DM-MD(n)X(n)-4KZ switchers do not support break-away audio on the HDMI outputs. In a multi-display system using multiple HDMI outputs, the volume settings must be configured properly to prevent multiple audio sources from playing at the same time.
- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.
- If one NVX device goes offline, the input status of other NVX devices also shows as offline.
- When using local inputs on NVX hardware configured as receivers and multiple displays have been configured, selecting the local input will cause the touch panel to display incorrect routing status.
- When upgrading from .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an “Invalid User/Password” message on the configuration webpage login.
- There is a delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.
- When the switcher is an HD-RX-210 and configured as follows (Controlled audio output: “display”, Analog audio output: “disabled”), the analog volume slider of the HD-RX-210 is still visible and can be modified even though it does not apply.

#### Known Issues/Limitations - Crestron One

- See the previous release notes for known issues with Crestron One.

#### Known Issues/Limitations - HTML5 (CH5)

- After a network outage on the touch panel, the currently routed source is not displaying on the touch panel. The user must re-select the source to see the controls again.
- When there are multiple displays, the source list column borders are the same height, regardless of how many sources are in each display list.
- AirMedia 3K: Disconnected page starts to display on touch panel after power outage. To recover, reboot the AirMedia 3K again.



- Progress spinner does not display on the touch panel.
- Room does not power on when occupancy is triggered via an occ sensor.
- Intermittent issue: Touch panel stuck on the "Please wait for initialization screen" after changing the theme from 1.0 smart graphics to ch5.
- Wrong icon displays with Resume button for AirMedia source.
- Panel stuck on "Please wait for system to initialize" on VC-4 system. CH5 is not supported when AVF is running on VC-4.
- See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.14.00.049 10/29/2021

## Changes since Last Version

### New Features

- Added support for HD-PS621/622.
- Added support for HD-PS401/402.
- Added support for .AV Framework running in Program Slot-0.
  - Please review **Appendix G: Upgrade to .AV Framework 6.14 from an Older Version** in the .AV Framework Users Guide to understand how to use .AV Framework in Program Slot-0 if .AV Framework is currently running in Program Slot-1.
- Added support for the PRO4 control system.

### Fixed Issues

- Fixed issue where COM port on the CEN-IO-COM would stop working with a serial display driver.
- Fixed issue where the user interface for BluRay and Roku on the CH5 Xpanel was not the same as the TSW touch panel.
- Fixed issue where no content would display after uploading an .AV Framework configuration file.

### Known Issues/Limitations - General

- **Web pages are not updating properly when using Chrome with a 3-Series control system.**
  - **Until this issue is resolved, Crestron recommends using Firefox or Edge when configuring an .AV Framework system.**
- When using an AM3K, the user interface will display Presentation Type instead of Present a Source after the AM3K is no longer connected to the control system.
- CEC control is intermittent for Apple 4K TV when using it with the HD-TX-301-C-2G.
  - This is a firmware issue in the transmitter and will be addressed in a firmware update.
- If a route is made while the HD-PS402 is not connected to the control system, the HD-PS402 will not sync with .AV Framework and update the route.
  - The user must re-select the route once the HD-PS402 is connected to the control system again.
- Fusion On-Prem is not able to discover a 4-Series when .AV Framework is running in Program Slot-0.
  - This is an issue with Fusion and will be addressed in a future update.
  - If .AV Framework 6.14 needs to be used with Fusion On-Prem, run the application in Slot-1.

- .AV Framework screensaver is not loading when the system is running in secure mode.
  - To work around the issue, either configure the touch panel to use its own screen saver or disable authentication in the touch panel connection to the control system.
- Audio cannot be heard from the analog input on the HD-TX-201-C-2G-E when no VGA signal is present.
  - This is a firmware problem with the HD-TX-201-C-2G-E and will be addressed in a future firmware release.
- When two displays are configured on the HD-PS622 and each has a different source routed, the analog audio will play the last selected source but the audio associated with the video output will reflect the selected source.
- RMC3 log filled with data aborts when using it with an HD-PS621.
  - This is a control system issue and will be addressed in the next release of .AV Framework.
- 
- After installing .AV Framework 6.14, updating the control system firmware may corrupt the new .AV Framework splash page, preventing users from opening the .AV Framework configuration page.
  - To correct the issue, manually delete the index.html page from the HTML folder and re-install .AV Framework 6.12.
- After idle logoff, AVF configuration drop-downs were missing from Dashboard after reentering credentials. Refresh the page to correct.
- Warning message displays every selection of routes on the touch panel if the display is not connected to the control system.
- When using NVX, if EST Mute is asserted after active paging, the paging announcement is cleared but the "Mute" is not asserted.
- .AV Framework allows default input to be applied to an NVX device set as a receiver that is not the primary display.
- NVX implementation allows adding Dante audio from an NVX device defined as a receiver to be used as an audio source for paging and breakaway audio, even though it is not supported.
- AirMedia not connected page displays instead of AirMedia presenting page on the touch panel while AirMedia is connected.
  - To correct, reboot the AirMedia hardware.
- 3-Series: User set to "Connect-only" Access Level cannot access AVF config pages.
- MPC3: Wrong error message displays while saving the configuration on the AVF UI.
- DMPS: After a factory restore, .AV Framework may report puf = unknown. To recover, re-install the desired puf file.
- DMPS: If the existing .AV Framework application was loaded using the .CPZ, loading a new .PUF may overwrite the existing .AV Framework application, even if the .CPZ is newer.
- DMPS: No error message displays after clicking the cancel button from the Sign in pop up.
- DMPS: After attempting to navigate various web pages, Web pages updates are slow, incomplete, or start timing out. This is an intermittent issue and eventually goes away.
- Keypad controls for Blu-Ray and Cable Box devices are not shown in the Zoom Room App when using Zoom "Room Controls".
- .AV Framework must be restarted after a Zoom routing change.
- After a power cycle on the HD-MD421, the device can lose its original IP address, causing a communication loss with .AV Framework. Users should configure the device with a static ip address or DHCP reservation.

- External System Trigger and Paging is not available for the HD-MD402/421.
- RS-232 and digital I/O are not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- CEC control is not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- HD-MD402 I/O status on the .AV Framework webpage dashboard does not update properly after a power cycle.
- When using Fusion on-prem with the RMC4, you must enable the cloud connection and use the cloud URL to connect to your on-prem Fusion server.
- The DM-MD(n)X(n)-4KZ switchers do not support break-away audio on the HDMI outputs. In a multi-display system using multiple HDMI outputs, the volume settings must be configured properly to prevent multiple audio sources from playing at the same time.
- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.
- If one NVX device goes offline, the input status of other NVX devices also shows as offline.
- When using local inputs on NVX hardware configured as receivers and multiple displays have been configured, selecting the local input will cause the touch panel to display incorrect routing status.
- When upgrading from .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an "Invalid User/Password" message on the configuration webpage login.
- There is a delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.
- When the switcher is an HD-RX-210 and configured as follows (Controlled audio output: "display", Analog audio output: "disabled"), the analog volume slider of the HD-RX-210 is still visible and can be modified even though it does not apply.

#### Known Issues/Limitations - Crestron One

- See the previous release notes for known issues with Crestron One.

#### Known Issues/Limitations - HTML5 (CH5)

- After a network outage on the touch panel, the currently routed source is not displaying on the touch panel. The user must re-select the source to see the controls again.
- When there are multiple displays, the source list column borders are the same height, regardless of how many sources are in each display list.
- AirMedia 3K: Disconnected page starts to display on touch panel after power outage. To recover, reboot the AirMedia 3K again.
- Progress spinner does not display on the touch panel.
- Room does not power on when occupancy is triggered via an occ sensor.
- Intermittent issue: Touch panel stuck on the "Please wait for initialization screen" after changing the theme from 1.0 smart graphics to ch5.
- Wrong icon displays with Resume button for AirMedia source.
- Panel stuck on "Please wait for system to initialize" on VC-4 system. CH5 is not supported when AVF is running on VC-4.
- See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.13.00.008 8/23/2021

## Changes since Last Version

### New Features

- Added support for DM-NVX-D20,D10,E20,E10.
- Added support for AirMedia 3K.
- Added early preview support for CH5 Web Xpanel when .AV Framework is used in VC-4.

### Fixed Issues

- None.

### Known Issues - General

- After installing .AV Framework 6.12, updating the control system firmware may corrupt the new .AV Framework splash page, preventing users from opening the .AV Framework configuration page.
  - To correct the issue, manually delete the index.html page from the HTML folder and re-install .AV Framework 6.12.
- After idle logoff, AVF configuration drop-downs were missing from Dashboard after reentering credentials. Refresh the page to correct.
- Warning message displays every selection of routes on the touch panel if the display is not connected to the control system.
- When using NVX, if EST Mute is asserted after active paging, the paging announcement is cleared but the "Mute" is not asserted.
- .AV Framework allows default input to be applied to an NVX device set as a receiver that is not the primary display.
- NVX implementation allows adding Dante audio from an NVX device defined as a receiver to be used as an audio source for paging and breakaway audio, even though it is not supported.
- AirMedia not connected page displays instead of airmedia presenting page on the touch panel while airmedia is connected. To correct, reboot the AirMedia hardware.
- 3-Series: User set to "Connect-only" Access Level cannot access AVF config pages.
- MPC3: Wrong error message displays while saving the configuration on the AVF UI.
- DMPS: After a factory restore, .AV Framework may report puf = unknown. To recover, re-install the desired puf file.
- DMPS: If the existing .AV Framework application was loaded using the .CPZ, loading a new .PUF may overwrite the existing .AV Framework application, even if the .CPZ is newer.
- DMPS: No error message displays after clicking the cancel button from the Sign in pop up.
- DMPS: After attempting to navigate various web pages, Web pages updates are slow, incomplete, or start timing out. This is an intermittent issue and eventually goes away.
- Keypad controls for Blu-Ray and Cable Box devices are not shown in the Zoom Room App when using Zoom "Room Controls".
- .AV Framework must be restarted after a Zoom routing change.

- After a power cycle on the HD-MD421, the device can lose its original IP address, causing a communication loss with .AV Framework. Users should configure the device with a static ip address or DHCP reservation.
- External System Trigger and Paging is not available for the HD-MD402/421.
- RS-232 and digital I/O are not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- CEC control is not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- HD-MD402 I/O status on the .AV Framework webpage dashboard does not update properly after a power cycle.
- When using Fusion on-prem with the RMC4, you must enable the cloud connection and use the cloud URL to connect to your on-prem Fusion server.
- UI version 1.0 is not supported for the Webx interface using the factory firmware file. Users must load the .AV Framework 6.12 .CPZ file when UI version 1.0 is needed for a Webx interface.
- In order to load the Webx interface, you must include the **exact name** of the HTML file in the browser URL. I.E. [https://<my\\_ip\\_address>/avf/Core3XPanel.html](https://<my_ip_address>/avf/Core3XPanel.html).
- The DM-MD(n)X(n)-4KZ switchers do not support break-away audio on the HDMI outputs. In a multi-display system using multiple HDMI outputs, the volume settings must be configured properly to prevent multiple audio sources from playing at the same time.
- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.
- If one NVX device goes offline, the input status of other NVX devices also shows as offline.
- When using **local inputs** on NVX hardware **configured as receivers and** multiple displays have been configured, selecting the local input will cause the touch panel to display incorrect routing status.
- When upgrading from .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an “Invalid User/Password” message on the configuration webpage login.
- There is a delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.
- When the switcher is an HD-RX-210 and configured as follows (Controlled audio output: “display”, Analog audio output: “disabled”), the analog volume slider of the HD-RX-210 is still visible and can be modified even though it does not apply.

#### Known Issues - Crestron One

- See the previous release notes for known issues with Crestron One.

#### Known Issues - HTML5 (CH5)

- After a network outage on the touch panel, the currently routed source is not displaying on the touch panel. The user must re-select the source to see the controls again.
- When there are multiple displays, the source list column borders are the same height, regardless of how many sources are in each display list.
- AirMedia 3K: Disconnected page starts to display on touch panel after power outage. To recover, reboot the AirMedia 3K again.
- Progress spinner does not display on the touch panel.

- Volume bar alignment is not correct on the touch panel.
- Screen saver is not appearing on the touch panel.
- Room does not power on when occupancy is triggered via an occ sensor.
- Source controls may occasionally show after a source selection, but the route was not made by the control system.
- Intermittent issue: Touch panel stuck on the "Please wait for initialization screen" after changing the theme from 1.0 smart graphics to ch5.
- Wrong icon displays with Resume button for AirMedia source.
- Panel stuck on "Please wait for system to initialize" on VC-4 system. CH5 is not supported when AVF is running on VC-4.
- See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.12.00.012 6/22/2021

## Changes since Last Version

### New Features

- Added support for control system “native” security and authentication on 3-Series platforms.
  - All existing .AV Framework user accounts will no longer be active. You must use the control system to manage user accounts.
  - All .AV Framework configuration is now accessed by typing in the IP Address of the control system. (Port 8008, which was previously used is no longer needed with the implementation of this new security feature.)
- Added support for new control processor DIN-AP4.
- Added support for new control processor AV4.
- Added support for new control processor MC4.

### Fixed Issues

- Desktop Xpanel does not support displays 5-8.

### Known Issues - General

- After installing .AV Framework 6.12, updating the control system firmware may corrupt the new .AV Framework splash page, preventing users from opening the .AV Framework configuration page.
  - To correct the issue, manually delete the index.html page from the HTML folder and re-install .AV Framework 6.12.
- After idle logoff, AVF configuration drop-downs were missing from Dashboard after reentering credentials. Refresh the page to correct.
- Warning message displays every selection of routes on the touch panel if the display is not connected to the control system.
- NVX implementation allows adding Dante audio from an NVX device defined as a receiver to be used as an audio source for paging and breakaway audio, even though it is not supported.

- AirMedia not connected page displays instead of airmedia presenting page on the touch panel while airmedia is connected. To correct, reboot the AirMedia hardware.
- 3-Series: User set to "Connect-only" Access Level cannot access AVF config pages.
- MPC3: Wrong error message displays while saving the configuration on the AVF UI.
- DMPS: If the existing .AV Framework application was loaded using the .CPZ, loading a new .PUF may overwrite the existing .AV Framework application, even if the .CPZ is newer.
- DMPS: No error message displays after clicking the cancel button from the Sign in pop up.
- DMPS: After attempting to navigate various web pages, Web pages updates are slow, incomplete, or start timing out. This is an intermittent issue and eventually goes away.
- Keypad controls for Blu-Ray and Cable Box devices are not shown in the Zoom Room App when using Zoom "Room Controls".
- After a power cycle on the HD-MD421, the device can lose its original IP address, causing a communication loss with .AV Framework. Users should configure the device with a static ip address or DHCP reservation.
- External System Trigger and Paging is not available for the HD-MD402/421.
- RS-232 and digital I/O are not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- CEC control is not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- HD-MD402 I/O status on the .AV Framework webpage dashboard does not update properly after a power cycle.
- When using Fusion on-prem with the RMC4, you must enable the cloud connection and use the cloud URL to connect to your on-prem Fusion server.
- UI version 1.0 is not supported for the Webx interface using the factory firmware file. Users must load the .AV Framework 6.12 .CPZ file when UI version 1.0 is needed for a Webx interface.
- In order to load the Webx interface, you must include the **exact name** of the HTML file in the browser URL. I.E. [https://<my\\_ip\\_address>/avf/Core3XPanel.html](https://<my_ip_address>/avf/Core3XPanel.html).
- The DM-MD(n)X(n)-4KZ switchers do not support break-away audio on the HDMI outputs. In a multi-display system using multiple HDMI outputs, the volume settings must be configured properly to prevent multiple audio sources from playing at the same time.
- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.
- If one NVX device goes offline, the input status of other NVX devices also shows as offline.
- When using **local inputs** on NVX hardware **configured as receivers and** multiple displays have been configured, selecting the local input will cause the touch panel to display incorrect routing status.
- When upgrading from .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an "Invalid User/Password" message on the configuration webpage login.
- There is a delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.
- When the switcher is an HD-RX-210 and configured as follows (Controlled audio output: "display", Analog audio output: "disabled"), the analog volume slider of the HD-RX-210 is still visible and can be modified even though it does not apply.

#### Known Issues - Crestron One

- See the previous release notes for known issues with Crestron One.

#### Known Issues - HTML5 (CH5)

- Room does not power on when occupancy is triggered via an occ sensor.
- Source controls may occasionally show after a source selection, but the route was not made by the control system.
- Intermittent issue: Touch panel stuck on the "Please wait for initialization screen" after changing the theme from 1.0 smart graphics to ch5.
- Wrong icon displays with Resume button for AirMedia source.
- Panel stuck on "Please wait for system to initialize" on VC-4 system. CH5 is not supported when AVF is running on VC-4.
- See the previous release notes for additional known issues with the HTML5 (CH5) user interface.



## Version Date

6.11.00.010 5/7/2021

## Changes since Last Version

### New Features

- Added support for control system “native” security and authentication on 4-Series platforms.
  - All existing .AV Framework user accounts will no longer be active. You must use the control system to manage user accounts.
- Added support for USB “follow” routing for DM-NVX hardware.
- Added support for the generic serial display driver.
- Added support for the CP4/CP4N control systems.

### Fixed Issues

- The Zoom Room Controls on the Zoom Room App do not automatically re-connect to .AV.
  - This was fixed by Zoom. You must run the latest Zoom Room software on the UC-Engine.
- When using the HD-MD402 aux audio output, if the same source is routed to HDMI1/DM1 and DM2, clearing the last selected route will result in the aux audio output being muted. Users must re-select the source to hear audio again.
- HD-MD402 volume icon shows up in the wrong column if the output rank is reversed.
- The system assigns the display to output 1, even if that display is already assigned to another output. This results in the display assigned to two outputs.
- In a multi-NVX configured system where one device is online and others are offline, NVX Switcher reports as “offline”, rather than “Partially Online”.

### Known Issues - General

- After installing .AV Framework 6.11, updating the control system firmware may corrupt the new .AV Framework splash page, preventing users from opening the .AV Framework configuration page.
  - To correct the issue, manually delete the index.html page from the HTML folder and re-install .AV Framework 6.11.
- Desktop Xpanel does not support displays 5-8.
- Keypad controls for Blu-Ray and Cable Box devices are not shown in the Zoom Room App when using Zoom “Room Controls”.
- After a power cycle on the HD-MD421, the device can lose its original IP address, causing a communication loss with .AV Framework. Users should configure the device with a static ip address or DHCP reservation.
- External System Trigger and Paging is not available for the HD-MD402/421.
- RS-232 and digital I/O are not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- CEC control is not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- HD-MD402 I/O status on the .AV Framework webpage dashboard does not update properly after a power cycle.

- When using Fusion on-prem with the RMC4, you must enable the cloud connection and use the cloud URL to connect to your on-prem Fusion server.
- UI version 1.0 is not supported for the Webx interface using the factory firmware file. Users must load the .AV Framework 6.10 .CPZ file when UI version 1.0 is needed for a Webx interface.
- In order to load the Webx interface, you must include the **exact name** of the HTML file in the browser URL. I.E. [https://<my\\_ip\\_address>/avf/Core3XPanel.html](https://<my_ip_address>/avf/Core3XPanel.html).
- The DM-MD(n)X(n)-4KZ switchers do not support break-away audio on the HDMI outputs. In a multi-display system using multiple HDMI outputs, the volume settings must be configured properly to prevent multiple audio sources from playing at the same time.
- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.
- If one NVX device goes offline, the input status of other NVX devices also shows as offline.
- When using **local inputs** on NVX hardware **configured as receivers and** multiple displays have been configured, selecting the local input will cause the touch panel to display incorrect routing status.
- When upgrading from .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an “Invalid User/Password” message on the configuration webpage login.
- There is a delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.
- When the switcher is an HD-RX-210 and configured as follows (Controlled audio output: “display”, Analog audio output: “disabled”), the analog volume slider of the HD-RX-210 is still visible and can be modified even though it does not apply.

#### Known Issues - Crestron One

- See the previous release notes for known issues with Crestron One.

#### Known Issues - HTML5 (CH5)

- Room does not power on when occupancy is triggered via an occ sensor.
- Source controls may occasionally show after a source selection, but the route was not made by the control system.
- See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.10.00.011 3/25/2021

## Changes since Last Version

### New Features

- Added support for Zoom “Room Controls”.
- Added support for HD-MD421.
- Added support for HD-MD402

### Fixed Issues

- When editing NVX USB device “Mode”, no warning message is presented to the user that the AVF system will be taken offline.

## Known Issues - General

- Zoom “Room Controls” feature is currently not working with VC-4. This will be resolved in the next .AV Framework release.
- After a power cycle on the HD-MD421, the device can lose its original IP address, causing a communication loss with .AV Framework. Users should configure the device with a static ip address or DHCP reservation.
- External System Trigger and Paging is not available for the HD-MD402/421.
- When using the HD-MD402 aux audio output, if the same source is routed to HDMI1/DM1 and DM2, clearing the last selected route will result in the aux audio output being muted. Users must re-select the source to hear audio again.
- RS-232 and digital I/O are not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- CEC control is not yet supported on the HD-MD402 and HD-MD421. This will be corrected in a later device firmware update.
- HD-MD402 volume icon shows up in the wrong column if the output rank is reversed.
- The system assigns the display to output 1, even if that display is already assigned to another output. This results in the display assigned to two outputs.
- HD-MD402 I/O status on the .AV Framework webpage dashboard does not update properly after a power cycle.
- When using Fusion on-prem with the RMC4, you must enable the cloud connection and use the cloud URL to connect to your on-prem Fusion server.
- UI version 1.0 is not supported for the Webx interface using the factory firmware file. Users must load the .AV Framework 6.10 .CPZ file when UI version 1.0 is needed for a Webx interface.
- In order to load the Webx interface, you must include the **exact name** of the HTML file in the browser URL. I.E. **Error! Hyperlink reference not valid..**
- The DM-MD(n)X(n)-4KZ switchers do not support break-away audio on the HDMI outputs. In a multi-display system using multiple HDMI outputs, the volume settings must be configured properly to prevent multiple audio sources from playing at the same time.
- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.
- If one NVX device goes offline, the input status of other NVX devices also shows as offline.
- In a multi-NVX configured system where one device is online and others are offline, NVX Switcher reports as “offline”, rather than “Partially Online”.
- When using local inputs on NVX hardware configured as receivers and multiple displays have been configured, selecting the local input will cause the touch panel to display incorrect routing status.
- When upgrading from .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an “Invalid User/Password” message on the configuration webpage login.
- There is a delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.

- When the switcher is an HD-RX-210 and configured as follows (Controlled audio output: “display”, Analog audio output: “disabled”), the analog volume slider of the HD-RX-210 is still visible and can be modified even though it does not apply.

#### Known Issues - Crestron One

- See the previous release notes for known issues with Crestron One.

#### Known Issues - HTML5 (CH5)

- Room does not power on when occupancy is triggered via an occ sensor.
- Source controls may occasionally show after a source selection, but the route was not made by the control system.
- See the previous release notes for additional known issues with the HTML5 (CH5) user interface.

## Version Date

6.09.00.028 2/1/2021

## Changes since Last Version

### New Features

- Added support for the HD-MD8x8-4KZ switcher.
- Added support for up to 8 displays when using switching hardware that supports 8 unique outputs. I.E. HD-MD8x8-4KZ or NVX hardware.
- Added support for DM-NVX-D80-IOAV.
- Added support for DM-NVX-E760/E760C.
- Added support for USB routing (fixed routes only) using DM-NVX end-points.
- Added early “preview” support for Crestron One mobile application.
- Added early “preview” support of the HTML5 (Crestron CH5) user interface.
- Adding paging and external trigger support for NVX hardware.

### Fixed Issues

- None.

### Known Issues - General

- The system assigns the display to output 1, even if that display is already assigned to another output. This results in the display assigned to two outputs.
- When using Fusion on-prem with the RMC4, you must enable the cloud connection and use the cloud URL to connect to your on-prem Fusion server.
- UI version 1.0 is not supported for the Webx interface using the factory firmware file. Users must load the .AV Framework 6.9 .CPZ file when UI version 1.0 is needed for a Webx interface.
- In order to load the Webx interface, you must include the **exact name** of the HTML file in the browser URL. I.E. https://<my\_ip\_address>/avf/Core3XPanel.html.

- The DM-MD(n)X(n)-4KZ switchers do not support break-away audio on the HDMI outputs. In a multi-display system using multiple HDMI outputs, the volume settings must be configured properly to prevent multiple audio sources from playing at the same time.
- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.
- When editing NVX USB device “Mode”, no warning message is presented to the user that the AVF system will be taken offline.
- If one NVX device goes offline, the input status of other NVX devices also shows as offline.
- In a multi-NVX configured system where one device is online and others are offline, NVX Switcher reports as “offline”, rather than “Partially Online”.
- When using local inputs on NVX hardware configured as receivers and multiple displays have been configured, selecting the local input will cause the touch panel to display incorrect routing status.
- When upgrading from .AV Framework, users must clear their browser cache. Failure to clear the browser cache may result in an “Invalid User/Password” message on the configuration webpage login.
- There is a delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.
- When the switcher is an HD-RX-210 and configured as follows (Controlled audio output: “display”, Analog audio output: “disabled”), the analog volume slider of the HD-RX-210 is still visible and can be modified even though it does not apply.

#### Known Issues - Crestron One

- The power off button displays even when the system is off.
- The paging / external system trigger message is not displayed while paging / external system trigger is active.
- The broadcast message is not displayed while a broadcast is active.
- The screen saver that is configured in .AV Framework can block the QR code.
- Display ranking is not supported.
- When more than one touch panel is defined in the system, users cannot navigate between the Home and Routing page(s), without having to navigate to the default page using the back button in the upper left corner.

#### Known Issues - HTML5 (CH5)

- The system initializing screen can close too early and allow control of the system before it is ready. This can cause erratic system behavior until the system has finalized initialization.
- General volume control is not optimized and can cause erratic behavior.
- When creating a “Reserve Now” meeting, users cannot set the End Time.
- The paging message does not remain on the touch panel, even if paging is still active.
- When an occupancy sensor turns the system on, the warming up message does not display on the touch panel.
- Cooling down message does not display on the touch panel, allowing users to interact with the system while it is shutting/cooling down.
- The transmission between the help page and home page “flickers” and shows a black screen.

## Version Date

6.08.00.025 12/14/2020

## Changes since Last Version

### New Features

- Added support for the new desktop Webx interface for remotely accessing the room touch panel interface from a computer. This new interface does not use Adobe Flash. Note: See the Known Issues section for details on UI version 1 support.
- Added support for DM-MD 4KZ switchers.
  - HD-MD4x1-4KZ
  - HD-MD4x2-4KZ
  - HD-MD8x4-4KZ

### Fixed Issues

- None.

### Known Issues

- UI version 1.0 is not supported for the Webx interface using the factory firmware file. Users must load the .AV Framework 6.8 .CPZ file when UI version 1.0 is needed for a Webx interface.
- After an .AV Framework restart, only the 1<sup>st</sup> relay pair will re-sync to an on state if configured to “Always On”. Once the room is powered on, the remaining relays set to “Always On” will sync their states and work as desired.
- The DM-MD(n)X(n)-4KZ switchers do not support break-away audio on the HDMI outputs. In a multi-display system using multiple HDMI outputs, the volume settings must be configured properly to prevent multiple audio sources from playing at the same time.
- The DM-MD4X1-4KZ and DM-MD4X2-4KZ switchers do not support breakaway routing on the AUX audio outputs. AUX 1 tracks HDMI output 1 and AUX 2 tracks. In a multi-display system, it is not possible to use an amplifier with an AUX output and have the source audio track.
- When a DM-NVX-360, DM-NVX-360c, DM-NVX-363 and DM-NVX-363c are configured as a receiver, CEC control will not work for the HDMI inputs. This is a DM-NVM firmware issue and will be resolved in a later firmware release for DM-NVX devices.
- When using the analog audio output on a DM-NVX, the audio does not work after a source route until the volume is adjusted. This is a DM-NVM firmware issue and will be resolved in a later firmware release for DM-NVX devices.
- DM-NVX-D80 is not supported.
- Paging with aux input routing is not supported when using DM-NVX hardware.
- When upgrading from .AV Framework 6.5 to 6.6, users must clear their browser cache. Failure to clear the browser cache may result in an “Invalid User/Password” message on the configuration webpage login.
- There is a significant delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.

## Version Date

6.07.00.013 10/30/2020

## Changes since Last Version

### New Features

- Added support for DM-NVX switchers. The initial support is limited to a single NVX receiver.

### Fixed Issues

- None.

### Known Issues

- When a DM-NVX-360, DM-NVX-360c, DM-NVX-363 and DM-NVX-363c are configured as a receiver, CEC control will not work for the HDMI inputs. This is a DM-NVM firmware issue and will be resolved in a later firmware release for DM-NVX devices.
- When using the analog audio output on a DM-NVX, the audio does not work after a source route until the volume is adjusted. This is a DM-NVM firmware issue and will be resolved in a later firmware release for DM-NVX devices.
- DM-NVX-D80 is not supported.
- Paging with aux input routing is not supported when using DM-NVX hardware.
- When upgrading from .AV Framework 6.5 to 6.6, users must clear their browser cache. Failure to clear the browser cache may result in an “Invalid User/Password” message on the configuration webpage login.
- There is a significant delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.

## Version Date

6.06.00.015 09/28/2020

## Changes since Last Version

### New Features

- Added support to allow MPC3 keypads to operate in a button-only mode. This allows the MPC3 to be used as a keypad-only device with an .AV Framework system.
  - Note: On VC-4, manual setting of the VC4 IP address in the MPC3 control system is required. Please refer to the manual for more detailed instructions.
- Added support for TSW-x70 touch panels.

### Fixed Issues

- Fixed issue where custom start button text would not support more than 20 characters.
- Fixed invalid letters underneath keypad buttons 6 and 9.
- Fixed issue where linking to a custom 800x600 logo would fail, even though the tooltip stated the resolution was supported.
- Fixed an issue where “Enable Touch Screen Auto Update” is enabled by default on the VC-4 even the VC-4 handles the touch panel UI project in its own configuration pages.

### Known Issues

- When upgrading from .AV Framework 6.5 to 6.6, users must clear their browser cache. Failure to clear the browser cache may result in an “Invalid User/Password” message on the configuration webpage login.
- There is a significant delay between switching sources when using the combination of an HD-RX-4K-210-C-E/-POE and HD-TX-301-C-E. When switching to the HDMI input, it can take on average 8-12 seconds or so.

## Version Date

6.05.00.012 06/24/2020

## Changes since Last Version

### New Features

- Allow DM transmitters to be used as switchers without requiring a DM chassis. The following models are supported: DM-TX-4K-202-C, DM-TX-4K-302-C, DM-TX-201-C, DM-TX-401-C, DM-TX-4KZ-202-C, DM-TX-4KZ-302-C
- Centralize audio controls and settings to provide a better workflow and user experience.
- Allow a single display to be mirrored to multiple displays via an external HDMI distribution amplifier.
- Provide a link to a platform-based operations guide on the configuration page.

### Fixed Issues

- Fixed issue where VGA input message was "... connect using HDMI cable provided" to "... connect using VGA cable provided".
- Fixed issue preventing the save/edit of SNTP settings.

### Known Issues

- When using the AM-300 as a switcher, the system allows setting Audio Output routing = No, but still passes audio.

## Version Date

6.04.00.009 04/28/2020

## Changes since Last Version

### New Features

- Supports paging and external system trigger system (EST) via digital I/O
- Supports user attributes for Crestron Certified Drivers (such as Device ID, Onscreen ID, Message Box, Custom (Wake-On-LAN))
- Support for CEN-IO-RY-204 and CEN-IO-IR-204
- Support for DM-TX-4KZ-100-C-1G

### Fixed Issues

- Fixed an issue with the CEN-IO-SER-102 where the device would report online but the driver test dialogue fails.



- Fixed an issue where source names with special characters would not appear on button panel configuration pages.
- All input names and room names are prevented from using "<>" characters to prevent a situation from the names not displaying on the touch panel correctly.
- Fixed an issue where touching an area on the screensaver on the touch panel would engage underlying functions.
- Fixed an issue where volume could be adjusted when the room is turned off

## Known Issues

- CEN-IO-COM-202 is not available in this release
- When a control system is rebooted when a paging or EST event is active, the associated event will be cleared.
- When EST is configured are configured to shut-down the room and EST events happen too quickly in sequence, certain displays may not power back on correctly. Work-around is to re-engage room power on by power button or routing a source.
- DMPS3-4K-250/350 may not turn on/off display drivers that use the Wake-on-LAN User attributes.
- When using the virtual switcher feature (direct display control via driver), source input devices that use CEC must be configured to turn off CEC control.

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Version	Date
6.03.00.013	01/28/2020

## Changes since Last Version

### New Features

- Added support for CEN-ODT-C-PoE Occupancy sensor
- Compatible with the new second generation AVF 2.0 user interface
- Room Power Mode options: Always On/Business Hours, Video Sync based, and Occupancy based

### Fixed Issues

- After importing a display driver, a user is able to add a second display on a single display system. Work-around is to delete the second display.
- Fixed an issue where certain actions could be taken in a room off state on the button panel and touch panel
- Fixed an issue when pressing room power off on a button panel when the system is already off will result in the system turning on momentarily and then shutting down.

### Known Issues

- Power Mode (Always On) triggers room shutdown when time goes beyond set ours AND the room is occupied (on the edge of the transition from use of business hours to use of occupancy). Recommendation is to pad the business hours.
- TSW-752/1052 panels require an initialization if switching between the AVF 1.0 (legacy) and 2.0 (new) user interface for the touch panel.

Version	Date
6.02.00.573	12/02/2019

## Changes since Last Version

### New Features

- Support for SIW Room Availability Signs
- Video Blank/Resume functionality follows the display set to “follow route” (if follow route is enabled for a particular display)
- When Video Blank or Resume is pressed, the button now shows “Blanking” or “Resuming” to indicate to a user that the command has been initiated.

### Fixed Issues

- Fixed an issue with adding multiple DGEs in a single system.
- Fixes an issue where video blank/resume indication on a button panel is flashing upon room power on/off

### Known Issues

- After importing a display driver, a user is able to add a second display on a single display system. Work-around is to delete the second display.
- Video blanking behavior on a button panel shows feedback for multiple projectors in a system.
- Video blanking is cleared upon button panel or touch panel network outage
- Pressing room power off on a button panel when the system is already off will result in the system turning on momentarily and then shutting down.
- Video blanking for secondary projectors post network outage may not persist
- Video blanking on different projector models behave differently depending on if the project handles video and audio mute together or independently
- Crestron Connected Driver Video Blanking does not update post network outage.

Version	Date
6.01.00.553	10/02/2019

## Changes since Last Version

### New Features

- Additional DM Endpoints Now Supported (Just for AVF on DMPS)
  - DM-TX-4KZ-302-C
  - DM-TX-4KZ-202-C
  - DM-RMC-4KZ-100-C
  - DM-RMC-4KZ-Scaler-C
- Supports the ability to read room name from VC-4 (Just for AVF on VC-4)
- Allows a custom image to be loaded and replace the default help page.
- When video mute is enabled, the system now provides blinking feedback on button panels to understand the video mute is engaged or disengaged.

## Fixed Issues

- When using and AM-200/300, when AirMedia is disabled, re-enabling may not be possible. Recover by removing the device and adding it to the system.
- Fixed an issue where it was not possible to assign an end-point to the DM Output of a DMPS3-4K-100-C
- Resolves an issue on button panels like the MPC3 where the backlight of the power button was not illuminated.
- Button panel names on button panel configuration page are not showing special characters from the routing page.
- Certain special characters will not show up in the input name on the touch panel.
- When using the new auto-load for touch panel feature, if a user wants to downgrade, and then upgrade again, an initialize is required (for TSW-760/1060)

## Known Issues

- Unable to discover MPC3 or DMPS3 room using Fusion. A device firmware fix will be required. As a work-around, use the device to fusion discovery mechanism.
- After an upgrade from AVF 5.7 to 6.0 or 6.0 to 6.1, for systems that use a display or projector that requires password authentication, it will be required to edit the device and re-enter the password for proper projector operation (otherwise it will remain offline)
- The custom help page when loaded using the WebX Panel, does not properly load images.
- When using the TT2-100 with a DM-TX-202-4KZ or DM-TX-302-4KZ, the status may show offline and the TT2 color feedback may be incorrect.
- When switching video routes particularly with break-away audio, an occasional audio bounce can be heard or audio from another route may be momentarily heard.
- Upon reboot, a previous route make occur and audio may be heard from another route.
- When using the Sony FWD driver with IR control, there may be a glitch when switching routes.
- When using the new auto-load for touch panel feature, if a user wants to downgrade, and then upgrade again, an initialize is required (for TSW-752/1052)
- AVF downgrade from 6.0 to 5.7/5.4 requires a DMPS3 restore.
- When using DIN-CEN-CN-2, the gateway and the assigned devices to this Crestnet gateway cannot be edited after system activation. Recover by removing the devices and re-adding it to the system.

Version 6.00.00.522

May 16, 2019

## Changes since Last Version

### New Features

- Added following control modules as supported devices:
  - o DIN-CEN-CN-2
  - o C2N-IO
  - o CEN-IO-COM-102
  - o CEN-IO-RY-104
  - o CEN-IO-IR-104

- When importing a backed up configuration, AVF now prompts the user to import the existing Fusion ID or generate a new one.
- AVF supports the ability to auto-load and update the touch panel VTZ project upon the touch panel being added to the system.

#### Fixed Issues

- N/A

#### Known Issues

- When using the new auto-load for touch panel feature, if a user wants to downgrade, and then upgrade again, an initialize is required (will be fixed in future TSW firmware)
- Button panel names on button panel configuration page are not showing special characters from the routing page.
- Certain special characters will not show up in the input name on the touch panel.
- Post a network outage, certain NEC displays may require triggering a particular route again for the route to actually happen.
- When restoring an AVF room with a CEN-IO gateway interfacing with an Epson driver, a reboot of gateway and/or restart of the room may be required.
- The CEN-IO-SER gateway may show offline after adding and removing from a room. It is recommended that AVF is re-activated after adding a device to that gateway to the driver is properly tested and configured.
- With 10 or more rooms logged into in the same browser using the VC-4, performance may become slower.
- The HD-MD-400 may require a reboot when an existing AVF room is upgraded.
- When using an HD-MD-200-C as a switcher, the system does not prevent the user from adding a projector and a display at the same time. This is not an allowable condition and is unsupported. A user should not add both types of devices to ensure system is properly functioning.
- Apple TV 4K CEC controls do not work with HD-MD-200-C on second HDMI input.
- Apple TV CEC controls do not work when using AM-300 as a switcher. IR controls work fine.
- AVF configurations are lost when adding a new license to a VC-4 Server.
- Intermittent login issues with valid credentials upon the first attempt when using AVF on VC-4
- DM-TX endpoints on AM-300 will not cross subnets without domain name or room ID on VC-4

Version 5.07.00.505

December 21, 2018

#### Changes since Last Version

##### New Features

- Added AM-200/300 as supported Wireless Presentation Gateway
- Added AM-200/300 as an external switcher
- Added HD-MD-200-C as a switcher (HD-MD-200-C-E & HD-MD-200-C-1G-E)
- Added HDI-MD-400-C as a switcher (HDI-MD-400-C-2G-E)

### Fixed Issues

- Fixed an issue relating to projector control being lost after several minutes of turning ON the projector.

### Known Issues

- When using an HD-MD-200-C as a switcher, the system does not prevent the user from adding a projector and a display at the same time. This is not an allowable condition and is unsupported. A user should not add both types of devices to ensure system is properly functioning.
- Apple TV 4K CEC controls do not work with HD-MD-200-C on second HDMI input.
- Apple TV CEC controls do not work when using AM-300 as a switcher. IR controls work fine.
- AVF configurations are lost when adding a new license to a VC-4 Server.
- Intermittent login issues with valid credentials upon the first attempt when using AVF on VC-4
- DM-TX endpoints on AM-300 will not cross subnets without domain name or room ID on VC-4

Version 5.06.00.491

October 12, 2018

Initial Version

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