

## GV2 Series Software 1.0.2

### General Remarks:

GV2 Series Software Version 1.0.2 is a software update suitable for all Nautel GV2 Series transmitters (**excluding GV2-60**) that use the NAC124A/01 controller.

For those who do not require any of the bug fixes/improvements identified below, are satisfied with current transmitter behaviour or require any of the unimplemented features, do not upgrade to this release.

You can download GV2 Series Software Version 1.0.2 here.

Prior to performing a software upgrade, please perform an evaluation of the transmitter's rack boards (Module Control/Interface PWB) to ensure that the transmitter is eligible to upgrade in its current state using the System Health Eligibility Evaluation Program <u>here</u>.

Software upgrade procedures can be found in the *Non-Standard Maintenance* section of the transmitter's *Operations & Maintenance Manual*. Please be sure to review and understand the complete set of instructions prior to beginning your upgrade.

For those installing a new SSD with GV2 software installed into the transmitter, the transmitter will undergo a first-time setup for installing the AUI (Advanced User Interface). On first boot, the transmitter will show the touchscreen calibration. Upon completing the touchscreen calibration, the transmitter will start installing the AUI. After the AUI has been installed, the system will reboot and begin its firmware upgrade which can be monitored via the controller's UI (User Interface). Once completed and the controller's UI shows "Upgrade successful!" (or an upgrade error message that the firmware upgrade failed), reload the transmitter's Local AUI to gain access to the login screen.

This software upgrade will take approximately 1 hour. Do **not** attempt to host reboot or ac cycle during the upgrade process. You must perform the initial screen calibration and then wait until the AUI login screen appears. The upgrade process will then be complete. You will be OFF-AIR during the upgrade process.

After performing the software upgrade, please compare the transmitter's installed firmware to the table below and confirm that they match. If they do not match, please contact Nautel Customer Service.

Device	Version
Controller	3.1.1.1
Exciter	1.9.1.1
Rack	2.0.0.4

Nautel does not recommend downgrading to previously released software.

## Changed:

- Improved the software upgrade functionality.
  - The software upgrade now attempts several retries when upgrading firmware for each device to ensure success.
  - The controller's UI now has improved messaging for software and firmware upgrading to indicate what the status is.
  - When a software upgrade is successful, the AUI and the controller's UI will show "Firmware upgrade successful!". Access the AUI and press the "OK" button on the popup to bring the AUI and the controller's UI back to their normal view.



- If the software upgrade is not successful, the AUI and the controller's UI will show a "Firmware Upgrade Error" with a message describing the cause of the error. Access the AUI and press the "OK" button on the popup to bring the AUI and the controller's UI back to their normal view.
  - However, if an exciter is the cause of the error, the AUI and controller UI will show "Firmware Upgrade Successful" instead of an error. After a software upgrade, please compare the transmitter's firmware versions to the table in General Remarks. If they do not match, please contact Nautel Customer Service.
- Improved responsiveness for the AUI when the Power Module Meters' page is shown on both a Remote and Local AUI session. However, there are still some responsiveness issues for GV2s with 3 or more rack (Module Control/Interface PWB) boards installed such as the transmitter lagging to turn RF off when the RF Off button is pressed while the Power Module Meters' page is open on the Remote and Local AUI sessions.

## Fixed:

• The progress bar for a software upgrade would complete at 101 % instead of 100 %.

## Unavailable Features:

If any of the features listed below are essential to transmitter operation, do not upgrade to this release.

- Audio Player is not available.
  - The Audio Player to AES 1 and Audio Player to AES 2 options are not available as audio sources in Presets.
- The Audio Processor (Orban Inside) instrument panel is not available.
- Site Control is not available.
- The EQ Impulse Response instrument panel is not available.
- The EQ Filter Delay instrument panel is not available.
- The Oscilloscope instrument panel is not available.

## Known Issues:

User Experience

- Connecting a USB storage device to a USB port in the back of the controller and ac cycling the transmitter results in the transmitter's AUI failing to load.
  - Remove the USB storage device and ac cycle the transmitter.
  - If a USB storage device is connected to the controller's front USB port, the AUI may not automatically detect it.
    - Performing an ac cycle will fix the issue.
- During boot-up after a new image is installed or the software is updated the AUI may get stuck to a black screen with a CLI (command line interface) cursor.
  - Performing a Host Reboot using the Remote AUI or controller UI will fix the issue.
- The Remote I/O's Analog Outputs page in the AUI is inaccessible.
  - The Analog Outputs menu in the controller's UI is functional.
- The transmitter may get into a state where RF cannot turn on or off and show an error message on the AUI.
  - Example:
    - Error Saving
    - Could not update RF On/Off
  - The issue will remedy itself within 15 seconds.



- If RF is turned off using the AUI, the AUI may not update the RF status and the meters may show values from when RF was on. However, the controller's UI correctly shows that RF is turned off and the meters reflect correctly.
  - Pressing the browser's refresh button for the Remote AUI's page remedies this issue.
  - Performing a Host Reboot using the AUI or controller UI remedies this issue for the Local AUI.
- Depending on the transmitter's frequency, the Mask Delta meter may not match the shown mask delta on the Dashboard's Spectrum Analyzer panel.

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89.3 MHz	96.4 MHz	103.1 MHz
89.4 MHz	99.0 MHz	103.2 MHz
92.5 MHz	99.1 MHz	103.3 MHz
92.6 MHz	99.2 MHz	104.2 MHz
92.7 MHz	99.3 MHz	107.7 MHz
92.8 MHz	99.4 MHz	107.8 MHz

• Known problematic frequencies are as follows:

- The transmitter may show "Presets Error" messages and the Presets menu may be inaccessible in the AUI after a software upgrade.
  - Performing a Host Reboot using the AUI or controller UI will remedy the issue.
- If a User performs a Host Reboot using the AUI, the touchscreen will still show the Local AUI with "Connection Lost".
  - The AUI will reconnect when the transmitter finishes its startup.
- Uploading new Security Certificate files causes the AUI to crash and the files are not uploaded.
  - Performing a Host Reboot using the AUI or controller UI will restore the AUI.
- Local AUI Screen Saver is disabled.
  - Attempting to enable Screen Saver Enabled and saving results in a fail.
  - Attempting to change the Screen Saver Timeout and saving results in a fail.
- If the Power Module Meters' page is shown on a Remote AUI session and the Local AUI, and the relevant session's logged in User attempts to press "RF Off", the transmitter's RF output will not turn off instantly and could take up to a few seconds to respond and turn off.
  - This may still happen for GV2s with 3 or more rack (Module Control/Interface PWB) boards installed.
- If an incorrect value is entered into an AUI field, the error message is incorrectly only showing "Value invalid" instead of a more descriptive reason.
  - This does not affect the Remote AUI.
- If an incorrect value is entered into an AUI field, the error message does not appear until the Save button is pressed.
  - This does not affect the Remote AUI.
- If the controller is not connected to a network, the No Lan Connection alarm does not trigger.
- If the transmitter's RF is turned on, the Active Preset is switched from a preset with digital audio set as the Main Audio Source to another preset with digital audio set as the Main Audio Source and the transmitter is ac cycled, the banner meters may show "--" for 1 second.
- Setting Installed Exciter(s) to Dual (A/B) does not allow access to the AUI's Exciter Changeover settings. If setting Installed Exciter(s) to Single (A), the AUI's Exciter Changeover settings can still be accessed.
  - Performing a Host Reboot using the AUI or controller UI will set the AUI's Exciter Changeover settings to have the correct accessibility depending on the Installed Exciter(s) setting.
- The AUI's Versions page shows the incorrect Exgine versions.



• Access the Exgine's User Interface using its network settings located in Exgine Settings under HD/DRM to view the Exgine's correct version.

### Air Chain

- If the User changes the Virtual Platform Configuration Modes to and/or from DHCP and saves, the AUI will not automatically show the new values.
  - Pressing the browser's refresh button for the Remote AUI's page will fix the issue.
  - Exiting and reentering the menu will fix the issue for the Local AUI.
- Saving the LAN2's Static IP Address to 0.0.0.0 will set both the IP Address and Subnet Mask to 125.213.249.83.
   Setting LAN2's Mode to "Off" will set LAN2's settings to 0.0.0.0.

### Dashboard

- The Spectrum's Resolution Bandwidth and Span ranges change depending on the set values for both settings without any indication that the ranges have changed.
  - Examples (FM Spectrum):
    - Setting the Resolution Bandwidth to 3000 Hz causes the Span's range to be 30 kHz to 1200 kHz.
    - Setting the Resolution Bandwidth to 5555 Hz causes the Span's range to be 55.55 kHz to 1200 kHz.
    - Setting the Span to 20 kHz causes the Resolution Bandwidth's range to be 300 Hz to 2000 Hz.
    - Setting the Span to 80 kHz causes the Resolution Bandwidth's range to be 300 Hz to 8000 Hz.
- The Spectrum Mask may display incorrectly when changing presets between different frequencies and modes.
  - Entering a setting page and returning to the Dashboard will fix the issue.
- Attempting to change the Dashboard's layout while logged in as a User with no administrative permissions will cause the layout to change back to its default upon logging in.
- If the active preset's Main Audio is changed from Analog L/R to MPX, the Lissajous Plot will still show L/R instead
  of I/Q.
  - Pressing the browser's refresh button for the Remote AUI's page will remedy the issue.
  - Exiting and reentering the Dashboard will remedy the issue for the Local AUI.

### Meters

- If the User has RF on while in a Meters page, changes to another page, turns RF off and then goes back to the original Meters page, the meters that do not constantly update will be stuck to the values that were shown prior to exiting the page.
  - Pressing the browser's refresh button for the Remote AUI's page will remedy the issue.
  - Exiting and reentering the menu will remedy the issue for the Local AUI.

### Notifications

- If an email is being inputted into an email field and the local-part (contents on the left of the @) is made up of 32 or more characters and then the @ symbol is inputted, adding any character after the @ makes the AUI more and more unresponsive.
  - Enter the @ symbol and complete the domain name before entering the local-part to avoid this issue.
- If the transmitter's DNS settings are set to incorrect values and a test email is sent, the User does not get notified that email fails to send.

### Orban Audio Processor

- Every second change to an Orban preset's settings will result in an error and the setting will not change.
  - Try to perform the action again.
    - Nautel Customer Service: 1-877-662-8835 | 902-823-3900 | support@nautel.com



- Setting ST ENC NO LIM as the active Orban preset and reloading the Audio Processing page shows none of the Orban presets as active.
- Changing the Active Orban Preset using Presets may not change the Active Orban Preset in the Audio Processing menu.
  - Pressing the browser's refresh button for the Remote AUI's page will remedy the issue.
  - Exiting and reentering the page will remedy the issue for the Local AUI.
- The Text Preset Save button in Audio Processing is not present.

### Presets

- If the transmitter is set to Local-only mode, Presets cannot be deleted, edited or copied using the Local AUI.
   Set the transmitter to Local/Remote mode to remedy the issue.
- If the transmitter is set to Local-only mode, the Active Preset cannot be changed using the Presets menu in the Local AUI.
  - Set the transmitter to Local/Remote mode to remedy the issue.
- Attempting to edit/clone/delete a preset or change the Active Preset may result in the ERROR\_TRANS\_PACKET\_LOSS error message and the action will not be completed.
  - Try to perform the action again.
- Attempting to change the Active Preset may result in the "Failed to communicate with hardware channel while changing active preset" error message.
  - Try to perform the action again.
- When creating a new Preset Scheduler rule, the rule may fail to be created.
  - Try to make the rule again.
- When editing a Preset Scheduler rule, the rule may fail to be updated.
  - Try to edit the rule again.
- When deleting a Preset Scheduler rule, the rule may fail to be deleted.
  - Try to delete the rule again.
- Deleting a Preset Scheduler Rule after it's deleted but before it's removed from the Rules list causes the Presets to become inaccessible and the Active Preset to not be changeable.
  - Performing a Host Reboot using the AUI or controller UI will fix the issue.
- Updating changes to a Preset may not automatically update the preset's values in the Preset Banner or the Presets menu.
  - Pressing the browser's refresh button for the Remote AUI's page will remedy the issue.
  - Logging out and logging in to the Local AUI will remedy the issue.
- If a preset's Audio Source is set to an MPX source and the Mode is set to HD, the Pilot 1 PPS Sync option is absent from the Other Settings menu.
  - Changing the Mode to FM/FM+HD/DRM+, changing the Audio Source to a non-MPX source and then changing the Mode back to HD will list the Pilot 1 PPS Sync option under the Other Settings menu.
- Enabling Mod Loss Timeout with the Action set to Change Preset, not changing the Mod Loss Preset and saving sets the Mod Loss Preset to None Selected.
  - Manually select the Mod Loss Preset being saving to get desired preset.
- The Orban preset list's index for a preset does not match up with the Audio Processing preset index, resulting in incorrect selections for the Local and Remote AUI's.
  - Select the desired Orban preset for a preset using the controller's UI (User Interface).
- Cloning a preset may result in two presets having the same name.



- If a preset with a name that has reached the maximum character limit is cloned, the last 6 characters of the name is replaced with "\_copy1". If the new preset is cloned enough to get "\_copy9" and is then cloned again, the Presets cannot be accessed and the Active Preset cannot be changed. In addition, another "\_copy1" will be created.
- Performing a Host Reboot using the AUI or controller UI will remedy the issue.
- If a new custom Orban preset is created, viewing the Orban Preset list in Presets will not show the new custom Orban preset. This also applies to deleting a custom Orban preset where the Orban Preset list will still show the deleted preset.
  - Pressing the browser's refresh button for the Remote AUI's page will remedy the issue.
  - Performing a Host Reboot using the AUI or controller UI remedies this issue for the Local AUI.
- If a new Preset is created, deleted or a Preset name is changed, viewing a Preset's Mod Loss Preset option will not show the new changes to the presets.
  - Pressing the browser's refresh button for the Remote AUI's page remedies this issue.
  - Performing a Host Reboot using the AUI or controller UI remedies this issue for the Local AUI.
- A Preset's Delete button does not automatically change depending on its activation/deactivation conditions.
  - Performing a Host Reboot using the AUI or controller UI will fix the issue.

### Remote I/O

- Some alarms listed in Digital Inputs and Digital Outputs are not necessary for the transmitter's type.
- If the Analog Outputs settings are changing via the controller's UI, the AUI will not automatically show the new values.
  - Pressing the browser's refresh button for the Remote AUI's page will fix the issue.
  - Exiting and reentering the menu will fix the issue for the Local AUI.

#### Reports

- Settings in Reports does not report settings such as Thresholds, Scale Factors, HD Settings, Spectrum Efficiency Optimizer or Network Settings.
- Sorting by Meter Collection, Meter Name, Value or Units in Meters under Reports will "freeze" the AUI and the AUI cannot be changed from the Meters page under Reports and no actions can be made. This happens on both the Local and Remote AUI.
  - Pressing the browser's refresh button for the Remote AUI's page will fix the issue.
  - Performing a Host Reboot using the AUI or controller UI will fix this issue.
- When filtering options from the Audio section in Reports, Audio Delay from Other Settings is included when it should not be.
- Events in Event History's downloaded report are not translated correctly.
  - Examples:
    - LOCAL\_REMOTE\_CHANGE instead of Local/Remote Change
    - rfDriveLow instead of Low RF Drive
- Power and frequency changes are not currently logged in Event History.

#### SNMP

- Entering an out-of-range value into the SNMP Trap's Receiver Port setting and saving results in a successful save with the incorrect value saved.
  - This does not affect the Remote AUI.



Users

- If a User is logged in with only RF Control permissions, the User cannot change the RF On/Off state.
- New Users cannot be created in the Local AUI if the transmitter is set to Local-only.
  - $\circ$  ~ Set the transmitter to Local/Remote mode to remedy the issue.
- The Auto Login toggle is not present under Users in the Remote AUI.
- The Auto Login option can only be enabled for the currently logged-in User and the User must have Administrator permissions.

### Miscellaneous

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- If the Exciter Changeover window is opened in the Remote AUI, the Main Exciter's "A" and "B" buttons may be swapped.
  - This does not affect the Local AUI.
  - HD/DRM settings for non-HD exciters can be edited but cannot be saved.
- If the Auto Changeover setting is changed via the controller's UI, the AUI will not automatically change the Auto Changeover's state.
  - Reopening the Exciter Changeover window from the Modulation panel or Hardware Configuration page will fix the issue.
- Main Audio Low Level and SCA Audio Low Level setting ranges in the AUI are -100 dB to -0.5 dB when they should be -100 dB to 0 dB.
- The AUI slows down when a new Remote AUI session is loading.
- Settings in Network have an "\*" next to their names to indicate that the fields require values. Since the page cannot be changed using the Remote AUI, the "\*" should not be in the Remote AUI.



## GV2 Series Software 1.0.1

### General Remarks:

GV2 Series Software Version 1.0.1 is a software update only suitable for Nautel GV2 Series transmitters that use the NAC124A/01 controller.

For those who do not require any of the bug fixes/improvements identified below, are satisfied with current transmitter behaviour or require any of the unimplemented features, do not upgrade to this release.

You can download GV2 Series Software Version 1.0.1 here.

Software upgrade procedures can be found in the *Non-Standard Maintenance* section of the transmitter's *Operations & Maintenance Manual*. Please be sure to review and understand the complete set of instructions prior to beginning your upgrade.

This software upgrade will take approximately 1 hour. Do **not** attempt to host reboot or ac cycle during the upgrade process. You must perform the initial screen calibration and then wait until the AUI login screen appears. The upgrade process will then be complete. You will be OFF-AIR during the upgrade process.

Nautel does not recommend downgrading to previously released software.

### Fixed:

• Depending on the hardware configuration of the transmitter, the Exciter A Offline alarm would sometimes trigger and clear within one second.

### Unavailable Features:

If any of the features listed below are essential to transmitter operation, do not upgrade to this release.

- Audio Player is not available.
  - The Audio Player to AES 1 and Audio Player to AES 2 options are not available as audio sources in Presets.
- The Audio Processor (Orban Inside) instrument panel is not available.
- Site Control is not available.
- The EQ Impulse Response instrument panel is not available.
- The EQ Filter Delay instrument panel is not available.
- The Oscilloscope instrument panel is not available.

### Known Issues:

User Experience

- Connecting a USB storage device to a USB port in the back of the controller and ac cycling the transmitter results in the transmitter's AUI (Advanced User Interface) failing to load.
  - Remove the USB storage device and ac cycle the transmitter.
- If a USB storage device is connected to the controller's front USB port, the AUI may not automatically detect it.
  - Performing an ac cycle will fix the issue.
- When performing a software update, the update may stall when updating firmware.
  - If the firmware installation does not progress for at least 30 seconds, performing an ac cycle and retrying the software update will fix the issue.
- During boot-up after a new image is installed or the software is updated the AUI may get stuck to a black screen with a CLI (command line interface) cursor.

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- Performing a Host Reboot using the Remote AUI or controller UI will fix the issue.
- The Remote I/O's Analog Outputs page in the AUI is inaccessible.
  - The Analog Outputs menu in the controller's UI is functional.
- The transmitter may get into a state where RF cannot turn on or off and show an error message on the AUI.
  - Example:
    - Error Saving
    - Could not update RF On/Off
  - The issue will remedy itself within 15 seconds.
- If RF is turned off using the AUI, the AUI may not update the RF status and the meters may show values from when RF was on. However, the controller's UI correctly shows that RF is turned off and the meters reflect correctly.
  - Pressing the browser's refresh button for the Remote AUI's page remedies this issue.
  - Performing a Host Reboot using the AUI or controller UI remedies this issue for the Local AUI.
- Depending on the transmitter's frequency, the Mask Delta meter may not match the shown mask delta on the Dashboard's Spectrum Analyzer panel.

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89.2 MHz	94.3 MHz	99.5 MHz
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• Known problematic frequencies are as follows:

- The transmitter may show "Presets Error" messages and the Presets menu may be inaccessible in the AUI after a software upgrade.
  - Performing a Host Reboot using the AUI or controller UI will remedy the issue.
- If a User performs a Host Reboot using the AUI, the touchscreen will still show the Local AUI with "Connection Lost".
  - The AUI will reconnect when the transmitter finishes its startup.
- Uploading new Security Certificate files causes the AUI to crash and the files are not uploaded.
  - Performing a Host Reboot using the AUI or controller UI will restore the AUI.
- Local AUI Screen Saver is disabled.
  - Attempting to enable Screen Saver Enabled and saving results in a fail.
  - o Attempting to change the Screen Saver Timeout and saving results in a fail.
- If the Power Module Meters' page is shown on a Remote AUI session and the Local AUI, and the relevant session's logged in User attempts to press "RF Off", the transmitter's RF output will not turn off instantly and could take up to a few seconds to respond and turn off.
- If an incorrect value is entered into an AUI field, the error message is incorrectly only showing "Value invalid" instead of a more descriptive reason.
  - This does not affect the Remote AUI.
- If an incorrect value is entered into an AUI field, the error message does not appear until the Save button is pressed.
  - This does not affect the Remote AUI.
- If the controller is not connected to a network, the No Lan Connection alarm does not trigger.



- If the transmitter's RF is turned on, the Active Preset is switched from a preset with digital audio set as the Main Audio Source to another preset with digital audio set as the Main Audio Source and the transmitter is ac cycled, the banner meters may show "--" for 1 second.
- Setting Installed Exciter(s) to Dual (A/B) does not allow access to the AUI's Exciter Changeover settings. If setting Installed Exciter(s) to Single (A), the AUI's Exciter Changeover settings can still be accessed.
  - Performing a Host Reboot using the AUI or controller UI will set the AUI's Exciter Changeover settings to have the correct accessibility depending on the Installed Exciter(s) setting.
- The AUI's Versions page shows the incorrect Exgine versions.
  - Access the Exgine's User Interface using its network settings located in Exgine Settings under HD/DRM to view the Exgine's correct version.

### Air Chain

- If the User changes the Virtual Platform Configuration Modes to and/or from DHCP and saves, the AUI will not automatically show the new values.
  - Pressing the browser's refresh button for the Remote AUI's page will fix the issue.
  - Exiting and reentering the menu will fix the issue for the Local AUI.
- Saving the LAN2's Static IP Address to 0.0.0.0 will set both the IP Address and Subnet Mask to 125.213.249.83.
  - Setting LAN2's Mode to "Off" will set LAN2's settings to 0.0.0.0.

### Dashboard

- The Spectrum's Resolution Bandwidth and Span ranges change depending on the set values for both settings without any indication that the ranges have changed.
  - Examples (FM Spectrum):
    - Setting the Resolution Bandwidth to 3000 Hz causes the Span's range to be 30 kHz to 1200 kHz.
    - Setting the Resolution Bandwidth to 5555 Hz causes the Span's range to be 55.55 kHz to 1200 kHz.
    - Setting the Span to 20 kHz causes the Resolution Bandwidth's range to be 300 Hz to 2000 Hz.
    - Setting the Span to 80 kHz causes the Resolution Bandwidth's range to be 300 Hz to 8000 Hz.
- The Spectrum Mask may display incorrectly when changing presets between different frequencies and modes.
  - Entering a setting page and returning to the Dashboard will fix the issue.
- Attempting to change the Dashboard's layout while logged in as a User with no administrative permissions will cause the layout to change back to its default upon logging in.
- If the active preset's Main Audio is changed from Analog L/R to MPX, the Lissajous Plot will still show L/R instead of I/Q.
  - Pressing the browser's refresh button for the Remote AUI's page will remedy the issue.
  - Exiting and reentering the Dashboard will remedy the issue for the Local AUI.

### Meters

- If the User has RF on while in a Meters page, changes to another page, turns RF off and then goes back to the original Meters page, the meters that do not constantly update will be stuck to the values that were shown prior to exiting the page.
  - Pressing the browser's refresh button for the Remote AUI's page will remedy the issue.
  - Exiting and reentering the menu will remedy the issue for the Local AUI.



#### Notifications

- If an email is being inputted into an email field and the local-part (contents on the left of the @) is made up of 32 or more characters and then the @ symbol is inputted, adding any character after the @ makes the AUI more and more unresponsive.
  - Enter the @ symbol and complete the domain name before entering the local-part to avoid this issue.
- If the transmitter's DNS settings are set to incorrect values and a test email is sent, the User does not get notified that email fails to send.

#### Orban Audio Processor

- Every second change to an Orban preset's settings will result in an error and the setting will not change.
   Try to perform the action again.
- Setting ST ENC NO LIM as the active Orban preset and reloading the Audio Processing page shows none of the Orban presets as active.
- Changing the Active Orban Preset using Presets may not change the Active Orban Preset in the Audio Processing menu.
  - Pressing the browser's refresh button for the Remote AUI's page will remedy the issue.
  - Exiting and reentering the page will remedy the issue for the Local AUI.
- The Text Preset Save button in Audio Processing is not present.

#### Presets

- If the transmitter is set to Local-only mode, Presets cannot be deleted, edited or copied using the Local AUI.
  - Set the transmitter to Local/Remote mode to remedy the issue.
- If the transmitter is set to Local-only mode, the Active Preset cannot be changed using the Presets menu in the Local AUI.
  - Set the transmitter to Local/Remote mode to remedy the issue.
- Attempting to edit/clone/delete a preset or change the Active Preset may result in the
  - ERROR\_TRANS\_PACKET\_LOSS error message and the action will not be completed.
    - Try to perform the action again.
- Attempting to change the Active Preset may result in the "Failed to communicate with hardware channel while changing active preset" error message.
  - Try to perform the action again.
- When creating a new Preset Scheduler rule, the rule may fail to be created.
  - Try to make the rule again.
- When editing a Preset Scheduler rule, the rule may fail to be updated.
  - Try to edit the rule again.
  - When deleting a Preset Scheduler rule, the rule may fail to be deleted.
    - Try to delete the rule again.
- Deleting a Preset Scheduler Rule after it's deleted but before it's removed from the Rules list causes the Presets to become inaccessible and the Active Preset to not be changeable.
  - Performing a Host Reboot using the AUI or controller UI will fix the issue.
- Updating changes to a Preset may not automatically update the preset's values in the Preset Banner or the Presets menu.
  - Pressing the browser's refresh button for the Remote AUI's page will remedy the issue.
  - Logging out and logging in to the Local AUI will remedy the issue.



- If a preset's Audio Source is set to an MPX source and the Mode is set to HD, the Pilot 1 PPS Sync option is absent from the Other Settings menu.
  - Changing the Mode to FM/FM+HD/DRM+, changing the Audio Source to a non-MPX source and then changing the Mode back to HD will list the Pilot 1 PPS Sync option under the Other Settings menu.
- Enabling Mod Loss Timeout with the Action set to Change Preset, not changing the Mod Loss Preset and saving sets the Mod Loss Preset to None Selected.
  - Manually select the Mod Loss Preset being saving to get desired preset.
- The Orban preset list's index for a preset does not match up with the Audio Processing preset index, resulting in incorrect selections for the Local and Remote AUI's.
  - Select the desired Orban preset for a preset using the controller's UI (User Interface).
- Cloning a preset may result in two presets having the same name.
  - If a preset with a name that has reached the maximum character limit is cloned, the last 6 characters of the name is replaced with "\_copy1". If the new preset is cloned enough to get "\_copy9" and is then cloned again, the Presets cannot be accessed and the Active Preset cannot be changed. In addition, another "\_copy1" will be created.
  - Performing a Host Reboot using the AUI or controller UI will remedy the issue.
- If a new custom Orban preset is created, viewing the Orban Preset list in Presets will not show the new custom Orban preset. This also applies to deleting a custom Orban preset where the Orban Preset list will still show the deleted preset.
  - Pressing the browser's refresh button for the Remote AUI's page will remedy the issue.
  - Performing a Host Reboot using the AUI or controller UI remedies this issue for the Local AUI.
- If a new Preset is created, deleted or a Preset name is changed, viewing a Preset's Mod Loss Preset option will not show the new changes to the presets.
  - Pressing the browser's refresh button for the Remote AUI's page remedies this issue.
  - Performing a Host Reboot using the AUI or controller UI remedies this issue for the Local AUI.
- A Preset's Delete button does not automatically change depending on its activation/deactivation conditions.
  - Performing a Host Reboot using the AUI or controller UI will fix the issue.

### Remote I/O

- Some alarms listed in Digital Inputs and Digital Outputs are not necessary for the transmitter's type.
- If the Analog Outputs settings are changing via the controller's UI, the AUI will not automatically show the new values.
  - Pressing the browser's refresh button for the Remote AUI's page will fix the issue.
  - Exiting and reentering the menu will fix the issue for the Local AUI.

### Reports

- Settings in Reports does not report settings such as Thresholds, Scale Factors, HD Settings, Spectrum Efficiency Optimizer or Network Settings.
- Sorting by Meter Collection, Meter Name, Value or Units in Meters under Reports will "freeze" the AUI and the AUI cannot be changed from the Meters page under Reports and no actions can be made. This happens on both the Local and Remote AUI.
  - $\circ$   $\;$  Pressing the browser's refresh button for the Remote AUI's page will fix the issue.
  - Performing a Host Reboot using the AUI or controller UI will fix this issue.
- When filtering options from the Audio section in Reports, Audio Delay from Other Settings is included when it should not be.
- Events in Event History's downloaded report are not translated correctly.
  - Nautel Customer Service: 1-877-662-8835 | 902-823-3900 | support@nautel.com



- Examples:
  - LOCAL\_REMOTE\_CHANGE instead of Local/Remote Change
  - rfDriveLow instead of Low RF Drive
- Power and frequency changes are not currently logged in Event History.

#### SNMP

- Entering an out-of-range value into the SNMP Trap's Receiver Port setting and saving results in a successful save with the incorrect value saved.
  - This does not affect the Remote AUI.

### Users

- If a User is logged in with only RF Control permissions, the User cannot change the RF On/Off state.
- New Users cannot be created in the Local AUI if the transmitter is set to Local-only.
  - Set the transmitter to Local/Remote mode to remedy the issue.
- The Auto Login toggle is not present under Users in the Remote AUI.
- The Auto Login option can only be enabled for the currently logged-in User and the User must have Administrator permissions.

### Miscellaneous

- If the Exciter Changeover window is opened in the Remote AUI, the Main Exciter's "A" and "B" buttons may be swapped.
  - This does not affect the Local AUI.
- HD/DRM settings for non-HD exciters can be edited but cannot be saved.
- If the Auto Changeover setting is changed via the controller's UI, the AUI will not automatically change the Auto Changeover's state.
  - Reopening the Exciter Changeover window from the Modulation panel or Hardware Configuration page will fix the issue.
- Main Audio Low Level and SCA Audio Low Level setting ranges in the AUI are -100 dB to -0.5 dB when they should be -100 dB to 0 dB.
- The AUI slows down when a new Remote AUI session is loading.
- Settings in Network have an "\*" next to their names to indicate that the fields require values. Since the page cannot be changed using the Remote AUI, the "\*" should not be in the Remote AUI.
- The progress bar for a software update completes at 101 % instead of 100 %.



## GV2 Series Software 1.0.0

## General Remarks:

GV2 Series Software Version 1.0.0 is a software update only suitable for Nautel GV2 Series transmitters that use the NAC124A/01 controller.

## Added:

• Initial release for GV2 transmitters.

## Known Issues:

User Experience

- Connecting a USB storage device to a USB port in the back of the controller and ac cycling the transmitter results in the transmitter's AUI (Advanced User Interface) failing to load.
  - Remove the USB storage device and ac cycle the transmitter.
- If a USB storage device is connected to the controller's front USB port, the AUI may not automatically detect it.
   Performing an ac cycle will fix the issue.
- Depending on the hardware configuration of the transmitter, the Exciter A Offline alarm may trigger and clear within one second.
  - Set Active Exciter to Exciter B to remedy this issue.
  - Set the transmitter's Installed Exciter(s) to Single (A) to remedy this issue.
  - This issue will be resolved in GV2 SW 1.0.1.
- If a User performs a Host Reboot using the AUI, the touchscreen will still show the Local AUI with "Connection Lost".
  - The AUI will reconnect when the transmitter finishes its startup.
- Uploading new Security Certificate files causes the AUI to crash and the files are not uploaded.
  - Performing a Host Reboot will restore the AUI.
- Site Control is not available.
  - If Site Control is essential to transmitter operation, do not update to this release.
- Audio Player is not available.
  - The Audio Player to AES 1 and Audio Player to AES 2 options are not available as audio sources in Presets.
  - o If Audio Player is essential to transmitter operation, do not update to this release.
- The EQ Impulse Response instrument panel is not available.
- The EQ Filter Delay instrument panel is not available.
- The Oscilloscope instrument panel is not available.
- The Audio Processor (Orban Inside) instrument panel is not available.
- Local AUI Screen Saver is disabled.
  - o Attempting to enable Screen Saver Enabled and saving results in a fail.
  - Attempting to change the Screen Saver Timeout and saving results in a fail.
- If the Power Module Meters' page is shown on a Remote AUI session and the Local AUI, and the relevant session's logged in User attempts to press "RF Off", the transmitter's RF output will not turn off instantly and could take up to a few seconds to respond and turn off.
- If an incorrect value is entered into an AUI field, the error message is incorrectly only showing "Value invalid" instead of a more descriptive reason.
  - This does not affect the Remote AUI.



- If an incorrect value is entered into an AUI field, the error message does not appear until the Save button is pressed.
  - This does not affect the Remote AUI.
- If the transmitter's RF is turned on, the Active Preset is switched from a preset with digital audio set as the Main Audio Source to another preset with digital audio set as the Main Audio Source and the transmitter is ac cycled, the banner meters may show "--" for 1 second.

### Air Chain

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- If the User changes the Virtual Platform Configuration Modes to and/or from DHCP and saves, the AUI will not automatically show the new values.
  - Refreshing the page will fix the issue.
  - Saving the LAN2's Static IP Address to 0.0.0.0 will set both the IP Address and Subnet Mask to 125.213.249.83.
    - $\circ$  Setting LAN2's Mode to "Off" will set LAN2's settings to 0.0.0.0.

### Dashboard

- The Spectrum's Resolution Bandwidth and Span ranges change depending on the set values for both settings without any indication that the ranges have changed.
  - Examples (FM Spectrum):
    - Setting the Resolution Bandwidth to 3000 Hz causes the Span's range to be 30 kHz to 1200 kHz.
    - Setting the Resolution Bandwidth to 5555 Hz causes the Span's range to be 55.55 kHz to 1200 kHz.
    - Setting the Span to 20 kHz causes the Resolution Bandwidth's range to be 300 Hz to 2000 Hz.
    - Setting the Span to 80 kHz causes the Resolution Bandwidth's range to be 300 Hz to 8000 Hz.
- Attempting to change the Dashboard's layout while logged in as a User with no administrative permissions will cause the layout to change back to its default upon logging in.
- If the active preset's Main Audio is changed from Analog L/R to MPX, the Lissajous Plot will still show L/R instead of I/Q.
  - Refreshing the page will fix the issue.

#### Meters

- If the User has RF on while in a Meters page, changes to another page, turns RF off and then goes back to the original Meters page, the meters that do not constantly update will be stuck to the values that were shown prior to exiting the page.
  - Refreshing the page will remedy the issue.

### Orban Audio Processor

- Every second change to an Orban preset's settings will result in an error and the setting will not change.
   Try to perform the action again.
- Setting ST ENC NO LIM as the active Orban preset and reloading the Audio Processing page shows none of the Orban presets as active.
- The Text Preset Save button in Audio Processing is not present.

#### Presets

- If the transmitter is set to Local-only mode, Presets cannot be deleted, edited or copied using the Local AUI.
- If the transmitter is set to Local-only mode, the Active Preset cannot be changed using the Presets menu in the Local AUI.



- Attempting to edit/clone/delete a preset or change the Active Preset may result in the ERROR\_TRANS\_PACKET\_LOSS error message and the action will not be completed.
  - Try to perform the action again.
- Attempting to change the Active Preset may result in the "Failed to communicate with hardware channel while changing active preset" error message.
  - Try to perform the action again.
- When creating a new Preset Scheduler rule, the rule may fail to be created.
  - Try to make the rule again.
- When editing a Preset Scheduler rule, the rule may fail to be updated.
  - Try to edit the rule again.
- When deleting a Preset Scheduler rule, the rule may fail to be deleted.
  - Try to delete the rule again.
- Deleting a Preset Scheduler Rule after it's deleted but before it's removed from the Rules list causes the Presets to become inaccessible and the Active Preset to not be changeable.
  - Performing a Host Reboot will fix the issue.
- Updating changes to a Preset may not automatically update the preset's values in the Preset Banner or the Presets menu.
  - Refreshing the page will fix the issue.
- If a preset's Audio Source is set to an MPX source and the Mode is set to HD, the Pilot 1 PPS Sync option is absent from the Other Settings menu.
  - Changing the Mode to FM/FM+HD/DRM+, changing the Audio Source to a non-MPX source and then changing the Mode back to HD will list the Pilot 1 PPS Sync option under the Other Settings menu.
- Enabling Mod Loss Timeout with the Action set to Change Preset, not changing the Mod Loss Preset and saving sets the Mod Loss Preset to None Selected.
  - Manually select the Mod Loss Preset being saving to get desired preset.
- The Orban preset list's index for a preset does not match up with the Audio Processing preset index, resulting in incorrect selections for the Local and Remote AUI's.
  - Select the desired Orban preset for a preset using the controller's UI (User Interface).
- Cloning a preset may result in two presets having the same name.
  - If a preset with a name that has reached the maximum character limit is cloned, the last 6 characters of the name is replaced with "\_copy1". If the new preset is cloned enough to get "\_copy9" and is then cloned again, the Presets cannot be accessed and the Active Preset cannot be changed. In addition, another "\_copy1" will be created.
  - Performing a Host Reboot will remedy the issue.
- If a new custom Orban preset is created, viewing the Orban Preset list in Presets will not show the new custom Orban preset. This also applies to deleting a custom Orban preset where the Orban Preset list will still show the deleted preset.
  - Refreshing the page will fix the issue.
- If a new Preset is created, deleted or a Preset name is changed, viewing a Preset's Mod Loss Preset option will not show the new changes to the presets.
  - Refreshing the Remote AUI's page remedies this issue.
  - Performing a Host Reboot remedies this issue for the Local AUI.
- A Preset's Delete button does not automatically change depending on its activation/deactivation conditions.
  - Performing a Host Reboot will fix the issue.



### Remote I/O

- Some alarms listed in Digital Inputs and Digital Outputs are not necessary for the transmitter's type.
- If the Analog Outputs settings are changing via the controller's UI, the AUI will not automatically show the new values.
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#### Reports

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  - Performing a Host Reboot using the controller's UI will fix this issue.
- When filtering options from the Audio section in Reports, Audio Delay from Other Settings is included when it should not be.
- Events in Event History's downloaded report are not translated correctly.
- Power and frequency changes are not currently logged in Event History.

### Notifications

• If the transmitter's DNS settings are set to incorrect values and a test email is sent, the User does not get notified that email fails to send.

#### SNMP

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  - This does not affect the Remote AUI.

#### Users

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- The progress bar for a software update completes at 101 % instead of 100 %.

## Installation Considerations:

This software update will take approximately 1 hour. Do **not** attempt to host reboot or ac cycle during the update process. You must perform the initial screen calibration and then wait until the AUI login screen appears. The update process will then be complete. You will be OFF-AIR during the update process.