

GV Series Software 6.0.0

General Remarks:

GV Series Software Version 6.0.0 is a software update only suitable for Nautel GV Series transmitters that use the NAC124* 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 update to this release.

Software Upgrade procedures can be found in FM24002, *NAC124* Controller: Replacing the SSD and Upgrading to GV SW 6.0.0*. Please be sure to review and understand the complete set of instructions prior to beginning your upgrade.

Added:

User Experience

- New AUI (Advanced User Interface) user experience.
 - GV transmitters now use HTML5 instead of Adobe Flash.
- Transmitter Info page with the following fields:
 - Transmitter Model
 - MAC Address
 - Transmitter Unique ID (GUID)
 - Transmitter Name/Call Sign
 - Can be changed, 15-character limit.
 - Appears in the Remote AUI's browser tab when a value is saved.
 - Serial Number
 - Can be changed, 16-character limit.
 - Appears at the bottom of the Main Menu when a value is saved.
- System Preferences page with the following settings:
 - Temperature Units Display
 - Can be changed between Celsius and Fahrenheit.
 - Turn-On Delay
 - Ramp-Up Speed
- Security Certificates page to manually upload security certificates to the transmitter (Remote AUI only).
- Alarms data panel that provides a quick glance to the active alarms.
- Audio Inputs data panel that shows the current measurements for the various audio inputs.
- Meters data panel to show specific meters that can be selected without having to leave the Dashboard.
 - Selecting the gear icon will show the Meter Selection window.
- Modulation data panel for the Active Exciter and the FM Modulation measurement.
 - Selecting the Active Exciter indicator while Dual Exciters is enabled will show the Exciter Changeover window.
- More than one string can now be saved for Read and Write for SNMP.
- More than one trap setting can now be saved for SNMP and can be switched between Available and Selected.
- Trap settings can now have a Receiver Community String.
- Email functionality now supports up to and including TLS 1.3.

HD Radio

- Added MP11 support for GV transmitters that use the NAC124* controller.

- Refer to IS22007, *GV Series – Compatibility and Power Capability for GV SW 5.1.0 and Newer* for MP11 power and efficiency information.
- Added HD Carrier Protect Filter to HD PowerBoost for GV transmitters that use the NAC124* controller.
 - Refer to IS22006, *GV Series – Changing the HD Carrier Protect Filter* to configure the HD Carrier Protect Filter.

Transfer Controller

- Added support for the VS-TC-HP Transfer Controller.
 - To enable support for the VS-TC-HP, the Transfer Control Enable option has been added to the Controller's UI (User Interface) User Settings menu.
 - VS-TC-HP-related settings are now shown in the UI when Transfer Control is enabled.
 - VS-TC-HP-related meters are now shown in the UI when Transfer Control is enabled.
 - VS-TC-HP-related alarms are now shown in the UI when Transfer Control is enabled and when the alarms become active.
 - New controller-based Transfer Controller Communications alarm when Transfer Control is enabled and the transmitter loses communication with the VS-TC-HP.
 - It is also logged in the AUI and the UI.

Changed:

- Pages in User Settings are now in Settings.
- User Accounts is now located in Settings as "Users".
- Audio Processor is now in Settings.
- Changeover settings are now in Hardware Configuration.
- The Email Configuration settings are now located in Notifications as "Email Server Configuration".
- The Engine Settings, HD Settings (formerly IBOC Settings) and Spectrum Efficiency Optimizer pages are now located in the HD/DRM page.
- Capture Meters, Capture Preset and Capture Settings of Critical Parameters are now in Reports as Meters, Active Preset and Settings, respectively.
- NTP Servers settings are now located in the Time page.
- Upgrade Software is now "Software" with the following pages:
 - Upgrades
 - To manage and perform software updates.
 - Versions
 - Lists the versions of the various software components.
- Scheduler is now located in the Presets menu as "Preset Scheduler".
- The Scheduler Enable/Disable toggle button is now in Preset Scheduler.
- The Audio, SCA and RDS tabs in Presets are now inaccessible when HD is selected as the operating mode.
- Logs are now located in Reports as "Event History".
- The Reset Latched Alarms button is now in Alarms.
- Starting a software update while RF is on will inhibit RF.
- Main Audio Low Level and SCA Audio Low Level ranges are now -100.0 dB to -0.5 dB.

Removed:

- Removed the "Current Settings" preset.
 - If changes are made to the Active Preset, the changes are immediately applied to the transmitter's operation.

- Removed the Audio Input Calibration page from Settings.
- Removed the Phone Home functionality from the AUI.
- Removed the Capture Alarms functionality from the AUI.
- Removed the Port Number option from the AUI.
 - Users that are upgrading their transmitter from the Flash-based AUI and have changed their default AUI access port from 3501 may need to reconfigure their port forwarding when using the new AUI.

Known Issues:

User Experience

- The Local and Remote AUIs have issues with updating their data after the Local AUI has been logged into.
- Meter values in Meters stop updating when the menu is accessed.
- Creating a new Preset Scheduler rule causes a copy of the created rule to be created approximately every minute.
- Presets can get into a state where they cannot be accessed using the AUI.
- The Local and Remote AUIs can get into a state where RF cannot be changed without refreshing the AUI.
- The Local and Remote AUIs can get into a state where the Active Preset cannot be changed without performing a Host Reboot.
- Changing the Temperature Units Display will not save correctly and revert to its previously saved option.
- 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.
 - 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.
- If the Power Module Meters' page is shown on a Remote AUI session, 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 does not affect the Local AUI.

Dashboard

- 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.
- The Text Preset Save button in Audio Processing is not present.

Presets

- Creating a new Preset Scheduler Rule will cause a copy of the created rule to be created approximately every minute.
 - Performing a Host Reboot will fix the issue.
- 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 AUI to lose connection.
 - Performing a Host Reboot will fix the issue.
- 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 for a preset does not match up with the Audio Processing order.
 - Select the desired Orban preset for a preset using the Controller’s UI.
- 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, a “_copy1” will be created with an error.
- 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 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 a Remote Output is set as Unused in the UI, the polarity is shown as “Active High” or “Active Low”.
- If the Analog Outputs settings are changing via the UI, the AUI will not automatically show the new values.
 - Refreshing the page will fix the issue.

Reports

- 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.
 - Refreshing the Remote AUI’s page will fix the issue.
 - Performing a Host Reboot using the 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.

Users

- New Users cannot be created in the Local AUI if the transmitter is set to Local-only.
- 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 Local AUI’s Touchscreen Calibration is actioned, the Remote AUI session is disconnected until the calibration has been completed.
- If the Exciter Changeover window is opened in the Remote AUI, the Main Exciter’s “A” and “B” buttons may be switched.
 - This does not affect the Local AUI.
- Changing the Temperature Units Display may not save correctly and revert to the previously saved option. This happens on both the Local and Remote AUI.
 - Performing a Host Reboot will fix this issue.
- HD/DRM settings for non-HD exciters can be edited but cannot be saved.
- 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 is opened.
- 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.

Installation Considerations:

This software update will take approximately 45 minutes. 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.