



Information Sheet IS22006

GV Series Changing the HD Carrier Protect Filter

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IS22006: GV Series – Changing the HD Carrier Protect Filter

INFORMATION SHEET

1 INTRODUCTION

This document provides instructions for configuring the HD Carrier Protect Filter present in GV SW versions 5.1.0 and newer. When enabled, the HD Carrier Protect Filter blocks the FM signals from interfering with the digital carriers.

1.1 Equipment Affected

This procedure applies to GV transmitters operating with software version GV SW 5.1.0 or newer.

1.2 Minimum Software Requirements

GV SW 5.1.0 or newer.

1.3 Responsibility for Implementation of Procedure

This procedure should be carried out by qualified station maintenance personnel who are familiar with GV transmitters and terminal programs such as puTTY.

1.4 Scheduling

The transmitter must be “off air” during this procedure.

1.5 Manpower Requirements

Implementing these instructions will require approximately 30 minutes.

1.6 Special Tools/Test Equipment/Software

- PC or laptop to serially connect to the transmitter
- USB-to-Serial cable
- Terminal program (puTTY), available at:
<http://www3.nautel.com/pub/Utilities/puTTY/>

1.7 Materials

No special materials are required to complete the procedure.

1.8 Publications Affected

This upgrade does not affect the technical documentation.

1.9 Identification of Modified Transmitter

Identifying modified transmitters informs future maintainers of the current configuration. Mark the transmitter with “IS22006” next to the serial number label using indelible ink to indicate it has been modified.



2 CHANGING THE HD CARRIER PROTECT FILTER

- (a) Using the transmitter's AUI or the Controller's front panel UI, set the transmitter to an **RF Off** state.
- (b) If necessary, download and install the terminal program to the PC or laptop (refer to Section 1.6 for location).
- (c) Connect the USB/Serial cable from the USB port on the PC to the Console port (A2J8) on the GV Controller's rear panel.
- (d) Open the terminal program (puTTY) and configure as shown in Figure 1 (COM1 shown for reference).

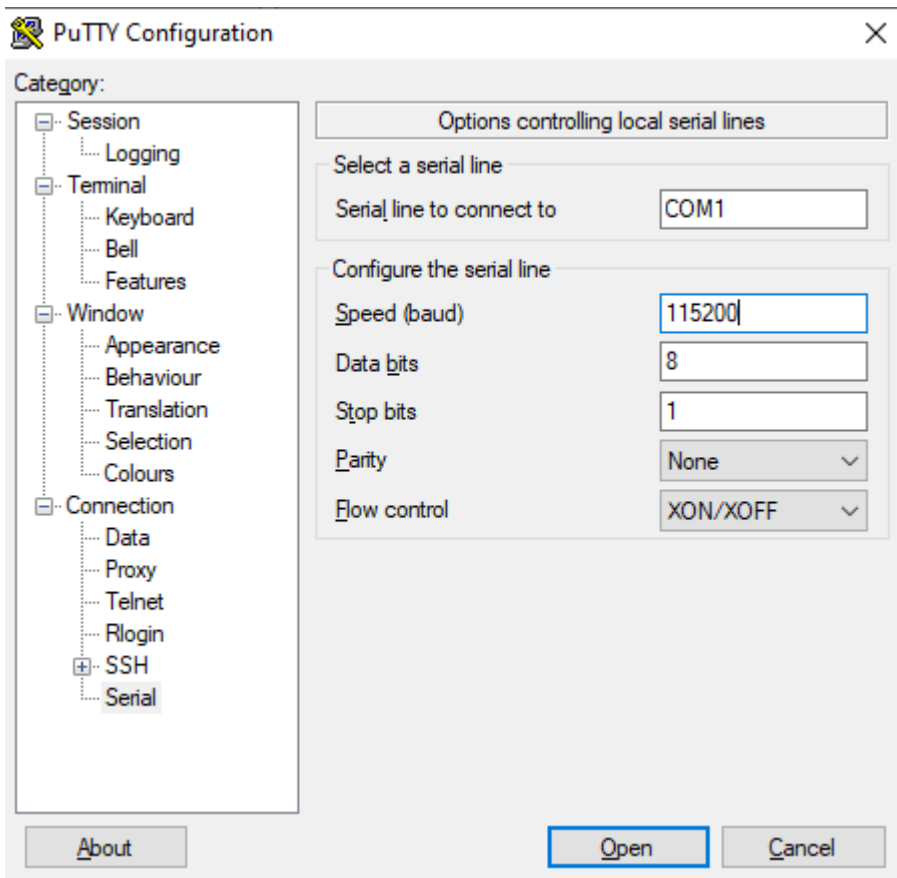


Figure 1: Putty Configuration

- (e) On the PC, press **Enter** two times. The terminal program should display "Type 'serialmenu' to enter the menu".
- (f) Type "**serialmenu**" to go to the Controller's main menu.
- (g) Type "**X**" to access the External Preset Menu. See Figure 2.

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COM4 - PuTTY
R) RF EA menu
W) Power menu
E) Preset menu
G) Signal generation menu
M) Misc. menu
Y) Equalization menu
P) PreD menu
C) Capture menu
S) Spectrum menu
U) UART code menu
O) RTOS status
X) External preset menu
Z) Calibration menu
D) RDS testing menu
B) Powerboost menu
L) Licensing menu

4) Get relevant alarms
5) Get all alarms
6) Get alarms log
Q) Exit menu
> x

Preset Menu
A: Apply preset
C: Copy active preset
D: Display preset contents
E: Edit preset contents
F: Default preset contents
L: Load preset from flash
S: Save preset to flash
N: Preset number: 1 (active) 1 (last non-zero preset)
P: HD Carrier Protect Filter (MP1 Bypass)
Q: Ordered preset contents
X: Erase flash completely
Z: Preset debugging info: OFF
U: Use external preset interface: ON
M: Mono R overridden to Mono L+R: OFF
Q: Return to previous menu.
>

```

Figure 2: External Preset Menu

- (h) Type “P” to access the HD Carrier Protect Filter type setting.

NOTE

The HD Carrier Protect Filter has four modes:

- *MP1 Bypass (default) - This mode does not apply a filter.*
- *MP3 - This mode sets the filter at ± 115 kHz from the FM's carrier frequency and is primarily used for MP3.*
- *MP11 - This mode sets the filter at ± 101 kHz from the FM's carrier frequency and is primarily used for MP11.*
- *Active Mode - This mode updates the filter to the exciter's detected service mode. If the exciter detects MP1, then the filter is set to MP1 Bypass and if the exciter detects MP11, then the filter is set to MP11.*

- (i) Type the following for whichever HD Carrier Protect Filter type is required and press **Enter**:

- 0** - Active Mode
- 1** - MP1 Bypass
- 3** - MP3
- 11** - MP11

- (j) Type “Q” and press **Enter** to return to the External preset menu. Repeat until “Type ‘serialmenu’ is displayed.

- (k) The HD Carrier Protect Filter is updated to the selected type. Disconnect the USB-to-Serial cable from the transmitter and return the transmitter to normal operating conditions.

The procedure is complete.

If you have any questions or require additional assistance, please contact Nautel's Customer Service Department at:

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Email: support@nautel.com

