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SERVICE BULLETIN
REICHHARDT RGS RECEIVER
WAAS SATELLITE UPDATES

Reconfiguration of the preferred WAAS PRN for
Reichhardt USA distributed receivers
Effective May 2022

Version 1.00
May 2022
US Version
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Contents

REICHHARDT RGS RECEIVER WAAS SATELLITE UPDATES

1. Introduction

Per a bulletin from the FAA's WAAS Test Team, WAAS PRN 138 Satellite is being decommissioned on May 17th 2022. This satellite is being replaced by new satellite PRN 135, which began transmissions on April 26th 2022.

This change affects all Reichhardt sourced RGS, A100, A101 and SMART-2 receivers with the default configuration for use in North America. The receiver will not be able to receive WAAS corrections after the PRN 138 decommissioning date unless a change to the receiver configuration is made.

This document walks through how to reconfigure the receiver's preferred WAAS satellite via the PSR system menus (change from PRN 138 to 135).

If needing to reconfigure a Reichhardt-sourced receiver without a connected PSR system, this is also possible using a variety of alternative methods (IE Windows-based RGS config program), which can be supported by Reichhardt in a separate document.

Please contact Reichhardt support with any questions at USAtechsupport@reichhardt.com.

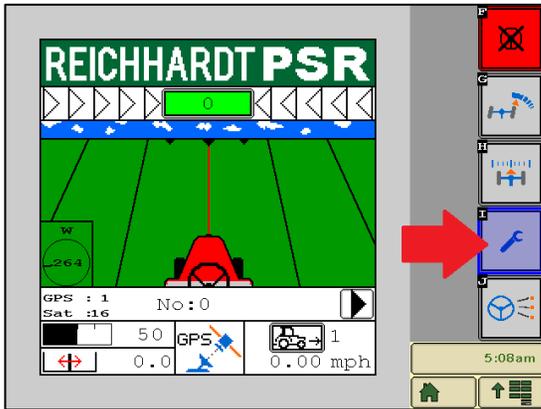## 1.1. Systems Supported by this document

- PSR with Software Version 2.116 (Sep-2010) or newer for RGS, A100 or A101 configuration.
- PSR with Software Version 2.181 (May-2020) or newer for SMART-2 configuration
- Requires Reichhardt RGS, A100, A101 or SMART-2 communicating via serial port to PSR. This assumes an existing healthy serial connection between the PSR system receiver.
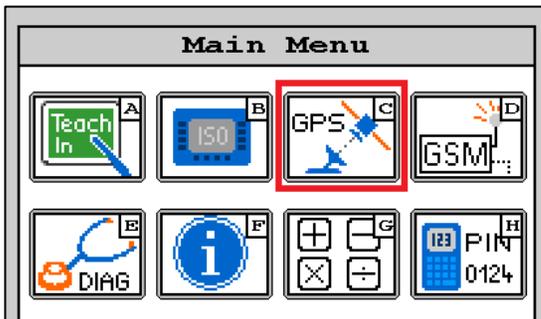
2. Revision History

Revision	Description	By	Date
1.00	Initial Revision	CDB	05/02/22

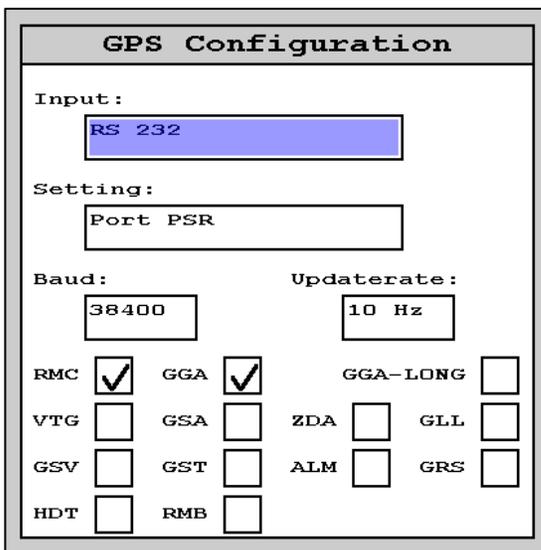# 3. Changing WAAS PRN via PSR Menus

This section explains how to change the WAAS PRN value of a connected RGS, A100, A101 or SMART-2 receiver and verify changes in diagnostics via the PSR menus (current release software). The menus may vary in older (legacy) PSR software, in which case, refer to the following section.

From the home PSR screen, press and hold the wrench softkey to enter the PSR Main Menu.
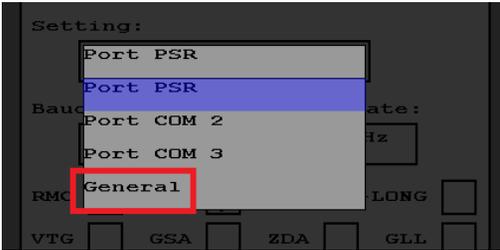

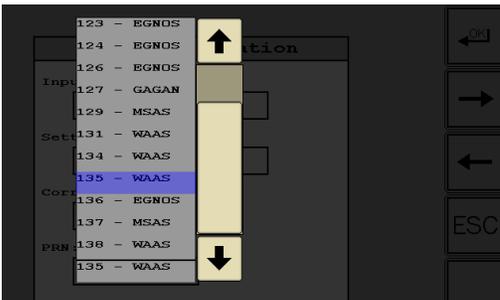From the Main Menu, select GPS (C) to enter the GPS Configuration menu.

In the GPS Configuration menu, if a supported receiver is detected, checkboxes will automatically populate in the lower half of the page.

Note: this page (number of checkbox options) may vary slightly based on receiver hardware.
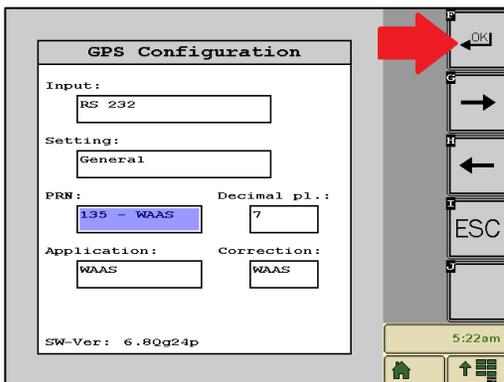
From the Setting dropdown, select "General" to access the general receiver settings.

Note: the displayed port options displayed may vary slightly depending on receiver model.
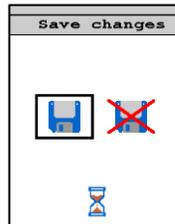

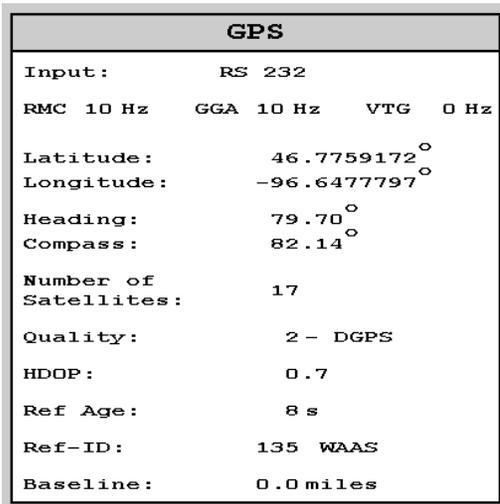From the general receiver settings page, select the "PRN" dropdown list and select "135 – WAAS".

Note: some of the other menu options on this page may vary based on receiver model and PSR software version. The only setting which needs to be changed is the PRN.

Press the "OK" soft-key to enter the save screen. Press "OK" again to save. An hourglass icon will begin flashing while settings are updated. This may take 10-15 seconds to complete. After saving, you will be navigated back to the main menu.

To verify the saved changes, from the main menu, select diagnostics (E), then press the right arrow soft-key until you are on the "GPS" page.
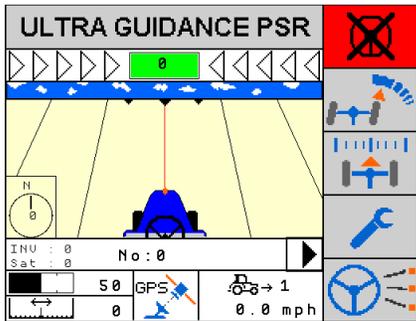

On this page, confirm:

Correction quality (should be "2 – DGPS")
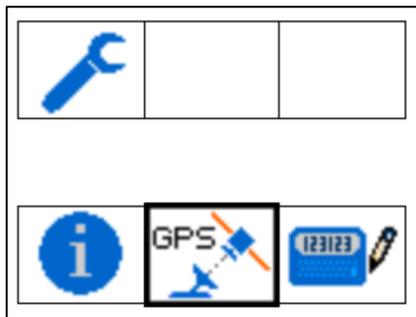Ref-ID (should be 135 WAAS).

Note: to receive correction, the receiver must have clear view of the sky and may take up to 10 minutes to converge depending on receiver model.

4. Changing WAAS PRN via Legacy PSR Menus

This section explains how to change the WAAS PRN value of a connected RGS, A100 or A101 receiver and verify changes in diagnostics via the PSR menus. Note that the SMART-2 receiver is NOT configurable in Legacy PSR software.
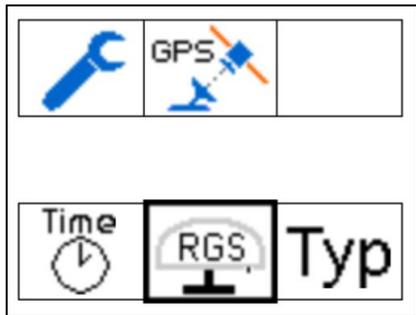
From the home screen, **press and hold** the wrench button to enter the system settings menu.
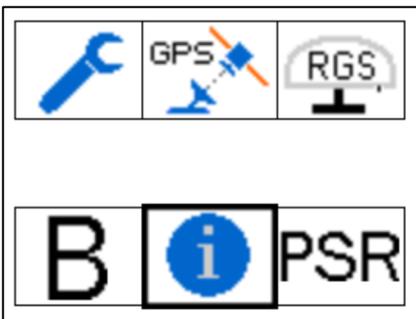
From the system settings menu, use the right or left arrow soft-keys to scroll through the available menus which display in the bottom row.
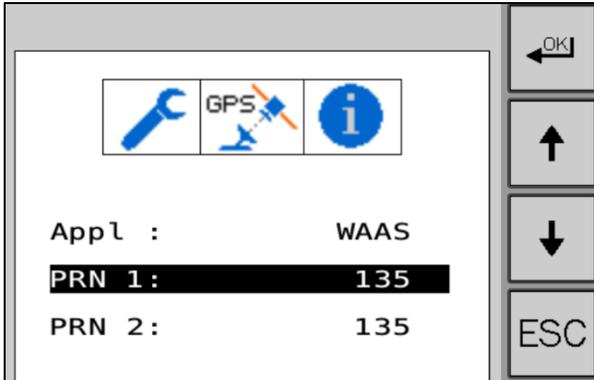
Highlight the GPS menu and press OK.

From the GPS menu, highlight the RGS icon and press OK.

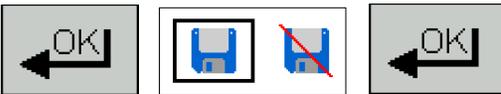If properly connected to a supported receiver, the PSR system should enter a Receiver Configuration menu.

From the Receiver Configuration menu, highlight the blue "information/settings" icon shown and press OK.
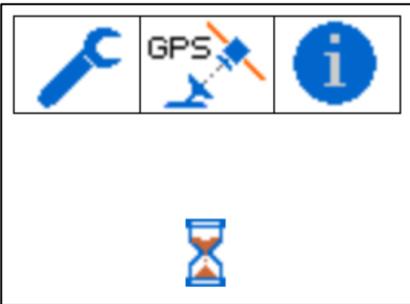
This page displays all configurable receiver settings.

Use the down arrow soft-key to highlight "PRN 1", then tap the "ok" repeatedly to change this value until it is set to "135". Repeat this for "PRN 2".
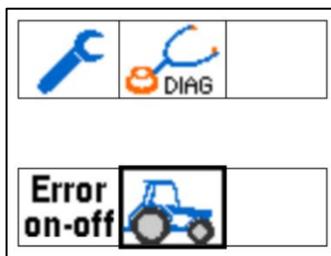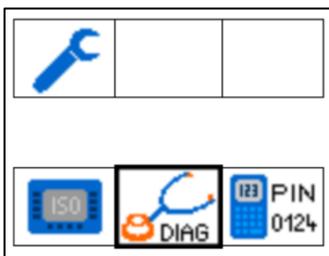

Press and hold the "OK" soft key to enter the save screen. Press "OK" again to save.

An hourglass icon will begin flashing while settings are updated. This may take 10-15 seconds to complete. After saving, you will be navigated back to the previous menu.

To verify the saved changes, from the system settings menu, enter the diagnostics menu shown. In newer iterations of legacy software, you may then need to also select the tractor icon to enter PSR Diagnostics. From the PSR Diagnostics page, press the right arrow softkey repeatedly (15+ times) to get to the GPS "REF ID" page.

On this page, confirm "REF ID: 135".

Note: to receive correction, the receiver must have clear view of the sky and may take up to 10 minutes to converge depending on receiver model.

END