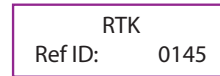


## RTK Display Screens

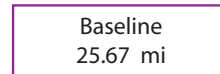
The Phoenix 300 displays information about the base station from which the RTK corrections are being received.

1. On the receiver Home display screen, press → until the RTK Reference ID screen is displayed.



The reference ID displayed is the identification number assigned to the base station which the Phoenix 300 receiver is currently using to receive RTK corrections.

2. Press ↓ to view the baseline, or distance from the base station location. Use this screen to help determine whether or not the vehicle is within range of RTK corrections from the base station.



## RTK Configuration Screens

The RTK configuration menu allows the operator to set up the RTK corrections to be used with the Phoenix 300 receiver. If RTK level corrections are not being used by the Phoenix 300 receiver, verify that the following settings are properly configured for your RTK network and base station.

1. To access the RTK configuration screens from the receiver Home display screen, press the ← or → buttons until the RTK Config screen is displayed.



2. Press ↓ to view the RTK Format screen.



The RTK format screen displays the current format selected for receiving RTK corrections from the assigned base station. Press ← and use the ↑ or ↓ keys to select one of the following formats for RTK correction messages:

- RTCMV3
- RTCM
- CMR+
- CMR
- RTCA

Verify the format transmitted from the base station and select the same format for the Phoenix 300 receiver.

3. Press ↓ to view the RTK Network screen.



The RTK network screen displays the current RTK network used to transmit RTK correction messages. Press ← and use the ↑ or ↓ keys to select one of the following RTK networks:

- Disabled - select disabled if the Phoenix 300 receiver will be operating with a Slingshot base station via a Field Hub.
- VRS (Virtual Reference Station) or iMax - select the VRS or iMax option when working with a CORS network. Select the network setting which matches the CORS network technology.

4. Press ↓ to view the Port B Baud Rate screen. Press ← and use the ↑ or ↓ keys to set the baud rate for signal coming out of the Phoenix 300 receiver.

## Overview

This document contains information for upgrading Phoenix 300 receivers to utilize an optional RTK unlock key. To be compatible with the RTK key, the Phoenix 300 receiver must have the following:

- NovAtel Serial Number starts with a 'D'
- Raven firmware:
  - 1.22 or higher (Phoenix 300-A's)
  - 2.05 or higher (Phoenix 300-B's)
- NovAtel firmware version 3.620 or newer

**Note:** Receivers with a NovAtel serial number that starts with 'S' are not compatible with the Slingshot Field Hub™. Software updates are available from the Applied Technology web site: [www.ravenhelp.com](http://www.ravenhelp.com)

## Checking Software Version & Updating the Phoenix 300 Receiver

Before ordering an RTK unlock key, use the following procedure to check the Raven firmware version, NovAtel serial number, and NovAtel firmware version currently installed on your receiver.

1. From the Home Display screen, press the arrow pointing to the right to display the Receiver Display screen.



2. Press the arrow pointing down to view the next Receiver Display information screen.

For receivers with software version 1.xx, press the arrow pointing down to display the Raven software version.

**Note:** To update a Phoenix 300 receiver with software version 2.xx, connect the update cable to the receiver using port A. Software version 1.xx receivers may be updated using port B.

## Using a Phoenix 300 with the Raven Slingshot Field Hub

To be compatible with the Raven Slingshot Field Hub and RTK correction service, the Phoenix 300 receiver must be compatible with the optional RTK unlock key. Review the receiver requirements above to determine compatibility.

A Field Hub adapter cable (P/N 115-0171-890) must be used to connect the Phoenix 300 receiver to the Slingshot Field Hub. **Connecting the Phoenix 300 receiver to a Field Hub using any standard serial cable could result in data overages and expensive wireless service charges.** Contact a local Raven or Slingshot dealer for more information and ordering.

## Phoenix 300 RTK Menus

If the optional RTK unlock code is entered, the following will be available in the Phoenix 300 menu structure:

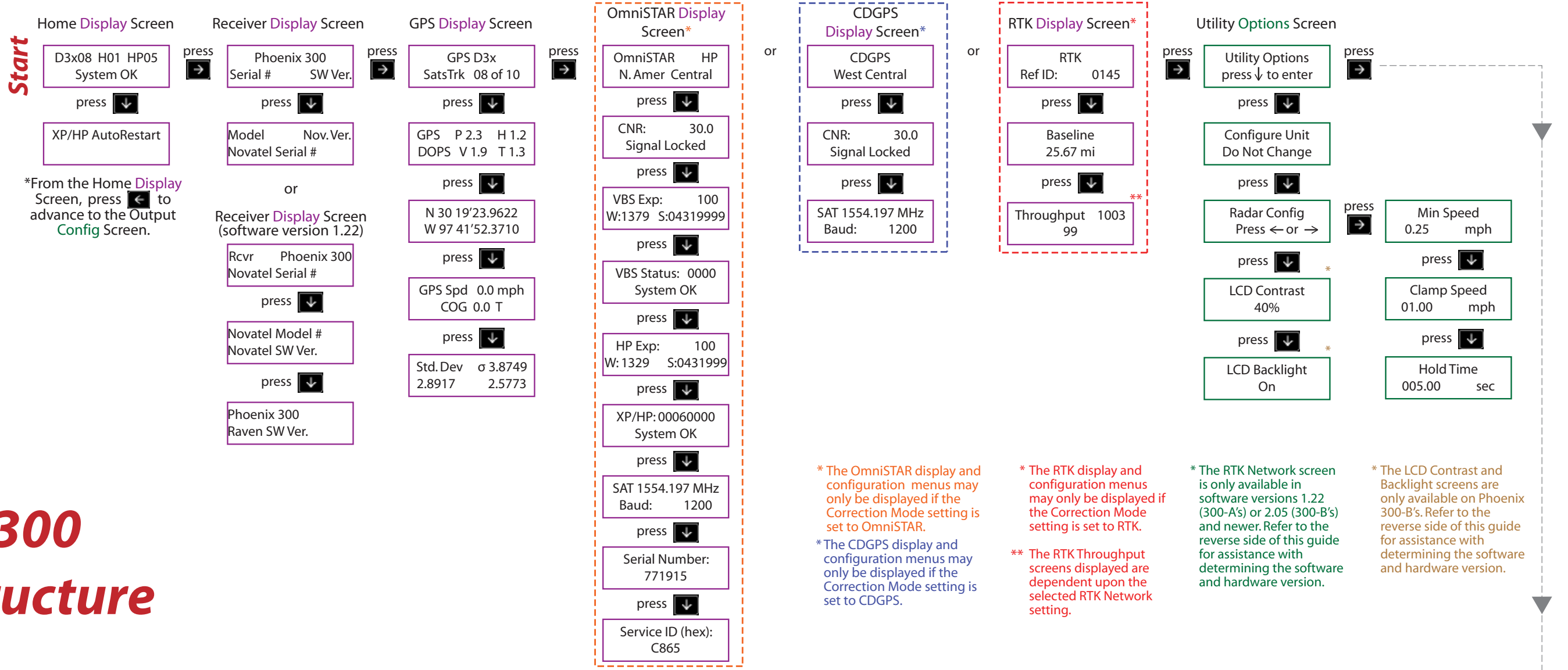
- RTK Correction Mode
- RTK Display
- RTK Configuration

## Setting the Phoenix 300 for RTK Correction Mode

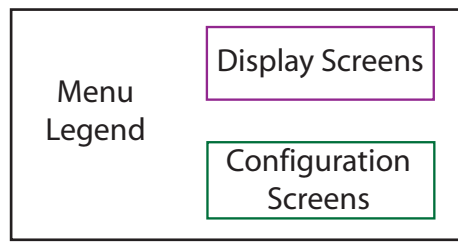
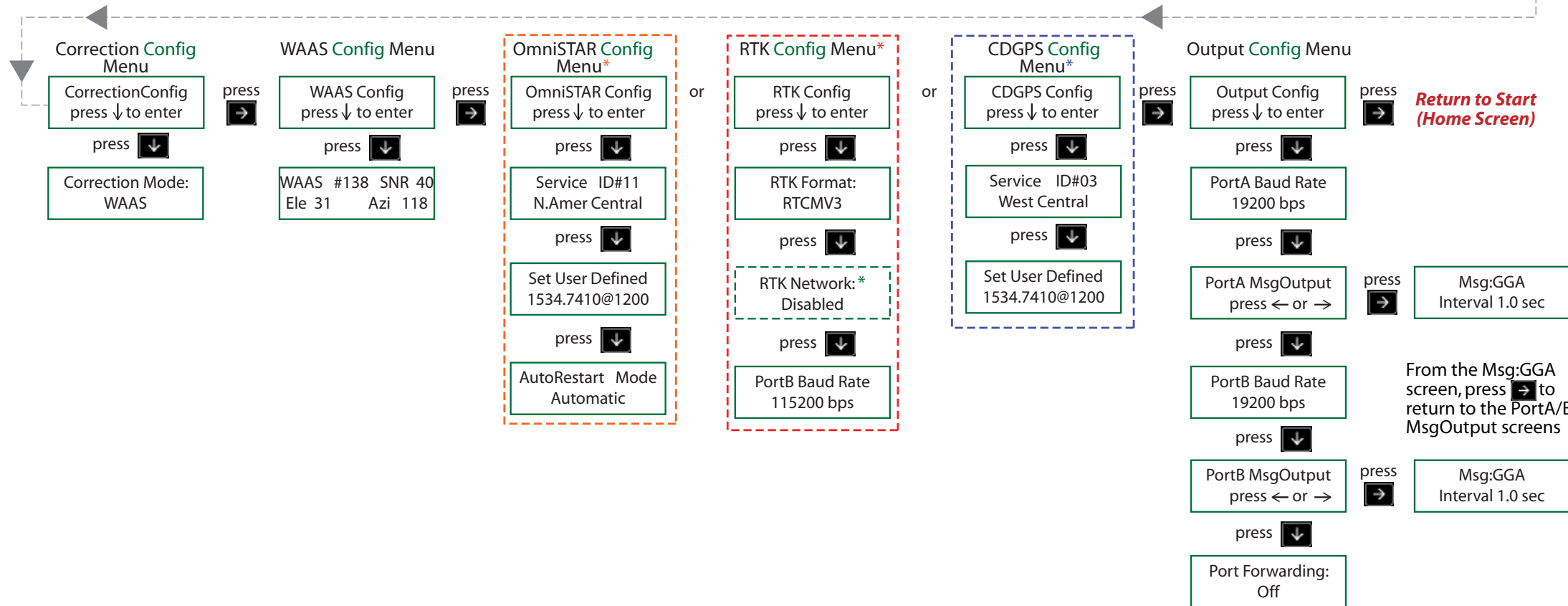
1. Contact your local Raven dealer to obtain an RTK upgrade key and to update the receiver.
2. Use the Menu Structure on the opposite side of this page to navigate to the Correction Mode screen in the Correction Config Menu.
3. Press ← and use the ↑ or ↓ keys to select the correction mode to RTK. When the correction mode is set to RTK, the RTK display and configuration menus will be available in the Phoenix 300 menu.

Refer to the following display screen section and the RTK configuration section on the back of this guide for a detailed description of the RTK menus and settings available on the Phoenix 300 receiver.

**Note:** Press and at the same time to return to the Home Display screen at any time.



# Phoenix 300 Menu Structure



**NMEA Rate Conversion**

0.1 seconds = 10 Hz  
 0.2 seconds = 5.0 Hz  
 1.0 seconds = 1.0 Hz  
 5.0 seconds = 0.2 Hz