## **Honeywell**

## SOFTWARE VERSION 3.0 IS NOW SHIPPING IN THE HGUIDE n580 NAVIGATOR

We're pleased to announce that a new software update is now shipping in the Honeywell HGuide n580 navigator. Many of these new features were previously only available in our Aerospace navigator product line. The HGuide development team has adapted Honeywell's proven algorithms for use in the HGuide n580 as part of our continuing goal to bring you Aerospace performance at Industrial prices.

## **VERSION 3.0 CONTAINS THE FOLLOWING IMPROVEMENTS:**

- Wheel Encoder Odometry Users can now provide encoder pulse counts using the recently added 0x4110 message.
- Customers provide the pulse count and scale factor (distance travelled per count). Honeywell's advanced navigation software use our proprietary algorithms to fuse the installation lever-arm and odometry measurements with inertial data from the internal HG4930 Inertial Measurement Unit to provide dead reckoning performance of less than 0.2% distance traveled in GNSS challenged environments such as urban areas or heavily forested regions.
- Honeywell's unique algorithms can estimate the error in the customer provided scale factor which often arise from changes in tire pressure or other environmental fluctuations. The HGuide software then automatically accounts for this change in the scale factor.
- The algorithms are also able to estimate error in the customer provided lever-arms and account for this in the navigation solution.
- **Motion Detection** Honeywell's proprietary algorithms for determining when the vehicle is in motion or stationary have also been added. This algorithm uses the inertial sensors in the HG4930 and the



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user provided odometry to ensure the device truly is stationary and then calibrate out inertial sensor errors that have built up while the vehicle was in motion. This can dramatically improve the accuracy of the vehicle's calculated position.

- Customer Configurable Communication Ports Customers can now configure the communication ports using the added 0x1005 message and the configurations can be stored to non-volatile memory (e.g. baud rate).
- Miscellaneous bug fixes and patches.

Please contact your sales representative for additional information or if you have any questions.

We plan to release updated software at regular intervals with additional and improved features.



