RSP1 Firmware Release Notes

Version V1.80 (Dec 17, 2014)

Application

Version used in first chip series (laser printed date code 1503-1.8) and Evaluation Kit #1503_xx

Compatibility with all earlier Versions

Parameter organization has changed.
Existing user parameters may be saved and restored when updating the firmware if needed.

Functionality

- Enhanced adaptive learning algorithm
- Introduction of Doppler frequency limits (Parameters $A06 and $A07)
- Enhanced sensitivity with 1 channel mono sensors

Parameters

New:

- $A06 and $A07 lower / upper Doppler frequency limits for output triggering
- $S0B serial debug speed selectable
- $S0C adaptive threshold reaction speed selectable
- $S10 .. $S1F new reserved parameter area for future use

Changed defaults:

- $A09 ADC gain changed from 04 (gain 16) to 03 (gain 8)

Corrections

- Bootloader emergency mode reachable, if firmware is corrupted. → Bootlaoder Bv1.80
- Read of hold time potentiometer at high sampling rates corrected

Errata

1. Possibly sporadic detection signal at maximum sensitivity
   Remedy: set parameter $S0A to value 3B (minimum trigger margin)

Version 1.72 … 1.74

Application

Inofficial version. Internal and demonstration use.

Version 1.71

Application

Used in first RSP1 Evaluation Kit series #4014_xx

Corrections

- Loop output $L00: sign error in power values corrected

Version 1.60

Initial RSP Version

Used in first chip samples.