 January, 2018

Update-Information for DSPTNC/Tracker-Firmware: Version 1.7

1. In General

Firmware 1.7 replaces version 1.6 as well as subsequent beta versions (up to 1.6k) and provides Autobaud functionality on the NMEA/GPS port as a main new feature. Some additional minor improvements and bug fixes round off the update.

2. Extensions

2.1 New Commands

@N (NMEA/GPS baud rate)

Default: 2 (4800 / 9600 Bd autobaud)

Value range: 0: fix 4800 Bd
1: fix 9600 Bd
2: 4800/9600 Bd autobaud

Depending on the chosen value, the baudrate of the NMEA input port will be set to a fixed value or detected automatically. Meanwhile GPS mice frequently use 9600 Bd instead of the old 4800 Bd standard.
On setting “autobaud”, the baudrate of the NMEA output port initially is always set to 4800 Bd but changed to the detected value as soon as valid NMEA data has been found. On “autobaud”, the baudrate search mode will be restarted after 60 seconds if no valid NMEA data has been detected within that timeout period.

The @N parameter can also be stored permanently in the flash ROM using the %ZS command, i.e. the default baudrate setting after power cycling can be defined by the user.

%AK (APRS Robust Packet Radio SSID)

Default: 16
Value range: 0-16

If the parameter is set to a value within the range 0…15, the Tracker utilizes that value as SSID for all Unproto RPR packets (e.g. APRS beacons, also in Toggle mode). Thus, for example, it is possible to discriminate between AFSK or RPR packets during DUAL mode operation (DUAL mode beacons).

2.2 Other Extensions / Improvements

- Possible maximum value of F(rack) parameter reduced from 15000 to 1500. The F value also is set in 10 msec steps, not in 1 msec steps as described in the manual previously.

- The CON LED now intermittently shows how many AX.25 connections are simultaneously active. (Not in KISS mode!) For every active connection, the LED switches from color green to red for 0.5 seconds and then back to green. The number of those “red flashes” corresponds to the number of AX.25 connections. Between these “blinking connection reports” (between end of last red flash and start of first red flash of next “report”) there always is a pause of 20 seconds.

3. Bug fixes

- Bug removed that could cause random change of the RPR speedlevel on Unproto transmissions like APRS beacons.