

# NAT-NACT

## Release Notes

### Version 3.00 Firmware

1. Added DDS-60 and power meter input DAC functions.
2. Added automatic start mode and Freq Step to dds and sig gen modes and eliminated +/- buttons from dds mode.
3. Added op mode DDS-60 enable to PLX mode and DDS-60 frequency sweep functions.
4. Added ability to adjust reference clock to op mode Sig gen.
5. Added ability to set slope and intercept using only a 20 dB attenuator.
6. Defined EEPROM locations for slope, intercept, and reference clock values.
7. Added LF ('\n') to end of input string in Terminal mode.
8. Added UPLD and UPLF DOS commands to send SD card files to the PC.
9. Modified UPLD to only input data lines (those starting with a decimal digit)
10. Added remote control to PLX-SIG GEN mode.
11. Moved LINEFEED filter from UART ISP to ssnputdata to allow binary data which is required for remote control.
12. Added Morse code support in remote control mode to be compatible with t Windows app Version 1r34.
13. Cleaned up DOS command processing so that the file and command can be selected in any order and eliminated the need to select a file when the command did not need a file name.
14. Added logic to reinitialize text area (tb1) after exiting a Ctrl-P plot (Escape).
15. Save calibration data to EEPROM and restore it on start up.
16. No longer necessary to clear calibration data buffer before loading new calibration data.
17. BUG FIX - SDLD DOS command not working from touch screen, changed code to recognize either a NULL or a SPACE as the end of the command and file name.
18. BUG FIX - Changed plot function in Terminal mode to wait for human input before terminating after a plot.
19. BUG FIX - Changed Morse code generator to not turn off the RF signal if keying RF was not selected. Also changed D command to set the DDS to the new default frequency.
20. BUG FIX - eelnit test for valid intercept point was bad causing the EEPROM to always be set to the default for slope and intercept.
21. Moved all initialize from EEPROM functions to eelnit and cleaned up the invalid EEPROM initialization stuff.
22. BUG FIX - double2decString was not able to properly handle cases where the scale factor was equal to the number of significant digits.

23. Changed DDS sweep logic to make sure there is at least 5 ms delay after setting the DDS frequency and reading the power meter output when doing sweeps of crystals. This slows down the sweep some but gives the crystal time to respond to the change in frequency.
24. Added numeric display of minimum VSWR and frequency to plot.
25. Added current VSWR display to signal generator screen and enabled dBm and VSWR displays during a DDS sweep.
26. Partitioned the font rendering function (writeCharXY) in anticipation of converting the C code to assembly code to improve performance.
27. Changed logic to locate second -3dB point to find the last -3dB point (was finding only the first). This allows some ripple on the top of a BPF sweep.
28. Changed iDataPoints and ROWS to longs to avoid overflow
29. BUG FIX - put limit checks on baud rate table index to prevent hangs in splash when EEPROM not initialized.
30. Expanded limits on slope and intercept to allow more latitude in SNAT configuration.