New RC210 Repeater Controller Firmware Developed by Lane VE7IHL

Objectives:

- Support a smaller subset of the original RC210 Firmware, suitable for remote mountain top installations.
- Provide a *Stable* RC210 firmware that does not need any further updates
- Add internal protocol and algorithms that support error detection and run-time error correction for:
    - Internally stored operating parameters (in NVM)
    - Serial communications with PC
    - Internal serial communications with the RTC (optional) board
- Add some new features to the RC210, such as supporting digital temperature sensors.
- Reduce the standby current consumption for better suitability with Solar Powered sites (about 50% reduction so far: at about 50ma with RTC board)

Supported:

- RC210 board rev 3.5(a) and possibly older revision boards (older boards not yet tested)
- RC210 RTC (Real Time Clock) board (only with new/updated firmware installed)
- *MOST* existing DTMF over the air commands to configure the RC210

Not Supported:

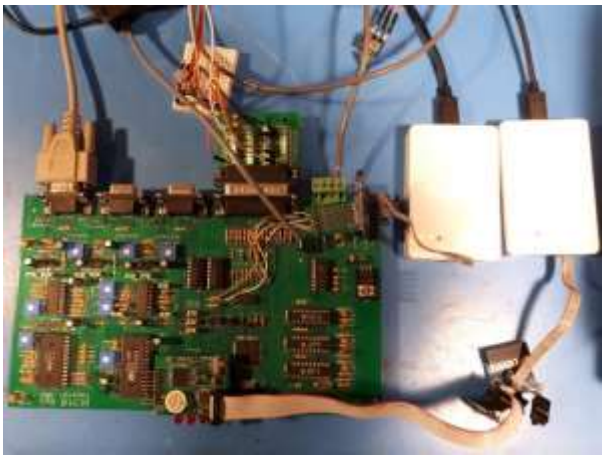
- Original PC Serial communication protocol
- Phone Patch
- Remote Base Operation
- Davis Instruments Weather Station
- Doug Hall RBI-1
- Extended Login Outputs
- RSSI reporting

PC Windows Configuration Software:

- New PC Configuration tool developed to support the configuring the new firmware

Status:

- In Beta testing phase. It is operational at my QTH for further development and testing. The implementation plan is to deploy it to three WKARC mountain top repeaters summer 2022.
- Currently operating as a bench test configuration



- Operating on the 147.040+ VE7BDY repeater located at my QTH (Nelson area)

Questions?