

Release 2.0.13

Release Date: 2014-03-18

| Package Elements: | Revision: |
|-------------------|-------------------|
| AP Bootloader | 0.0.3 |
| AP Kernel | 0.0.5 (no change) |
| AP RootFS | 2.0.13 |
| Integrated CM | 1.31.2.0 |
| OIB MCU | 2.1.7 |
| OIB DSP | 0.1.8 |

New Features Added in TD220X Firmware

- Bootloader 0.0.3 updated to support new Nautilus flash chip.
- Includes Integrated CM software version 1.31.2.0. The BCM maintains slot assignments for repeater based locomotives, supports the TX disable TLV, and transmits TLVs to TCMs.

Known Errata and Limitations in TD220X Firmware

- The radio must be rebooted when the STFP epoch size is changed in the menu.

Special Notes for TD220X Firmware

- When powering up with upgraded radio firmware, the radio may remain in the “Initialization” state (as shown on the initial menu screen) for up to 5 minutes while the internal processors are reprogrammed. The radio will not start operating until it has reached the “Operational” state.
- This release is not compatible with any versions of the TD220 (non-X) firmware

Release History

1.5.9 (2012/02/02)

- Checks the TX Key Timeout value in flash and sets it to the default value of 5 if the value is 0
- The Force Key process sets radio power based on the menu value when keying the modem
- Removed MAINT/KIOSK enumerated values from radio driver to enable TEST mode
- Tx Dropped will increment if any STFP messages arrive while Force Key is enabled
- Step size is 1.25 kHz for 220X, 242 and 256 models
- Tuning range for 220X is 216.00625 to 219.99375. Default is 218.25000.

2.0.0 (2012/08/15)

- Authorization code support restored to menu and radiomgr
- Includes Integrated CM software version 1.0.0.8
- Menu provides power limit setting and provides automatic duty cycle settings
- 2W transmits have a 100% duty cycle, 3W and greater transmits have a 30% duty cycle

2.0.1 (2012/08/27)

- Includes Integrated CM software version 1.0.0.10
- SNMP trap patch applied
- SNMP sysObjectID patch applied
- TD220X MIB file updates

2.0.2 (2012/10/16)

- MCU firmware update incorporates TD450/SPI changes
- SNMP access to Reprogramming Message

- Includes Integrated CM software version 1.0.0.13 (TLVs and RCP Beacons)

2.0.3 (2012/10/18)

- Includes Integrated CM software version 1.0.0.14 (Repeater Slot Assignment)

2.0.4 (2012/11/06)

- radiomgr will send intermittent “dsp md dkey” commands to MCU when OTA sync is lost
- Event logger logs a single OTA sync event during a 60 second window
- Includes Integrated CM software version 1.0.0.14

2.0.5 (2012/11/19)

- Radiomgr keeps timeslot sequence error statistics
- BCM/WCM run at nice level 4, run-xcm checks CM processes every 20 minutes
- Includes Integrated CM software version 1.0.0.17

2.0.6 (2013/03/13)

- Includes Integrated CM software version 1.0.0.25

2.0.7 (2013/04/09)

- Includes Integrated CM software version 1.0.0.30

2.0.8 (2013/04/18)

- Includes Integrated CM software version 1.0.0.31

2.0.9 (2013/05/16) (intermediate release for troubleshooting lock-up issue)

- Includes Integrated CM software version 1.0.0.31
- radiomgr issues dekey commands each second for 12 seconds, then once every 12 seconds
- radiomgr sends LogDiagMessage if STFP logging is enabled to (log port + 100)

2.0.10 (2013/05/28)

- Adds patch to re-enable A/D if MCU gets stuck in receiving state where stop_atod() turned off the A/D but rx_entry() never turned it on. This can happen due to erratic keying strobes when an OTA sync'd unit is having trouble syncing to beacons that are not properly aligning in slot 0 due to PPS differences at the base radios.
- Includes Integrated CM software version 1.0.0.31
- radiomgr issues dekey commands once every 60 seconds starting 60 seconds after OTA sync loss
- removed radiomgr UDP diagnostic message from 2.0.9

2.0.11 (2013/06/10)

- Parameter table updated to maintain compatibility with Integrated CM software version 1.0.0.31

2.0.12 (2013/12/09)

- MCU will not re-key if already transmitting. This prevents a mobile from entering “Synth out of lock” when synchronized to a base with widely varying PPS pulses.
- Includes Integrated CM software version 1.0.0.31.1. BCM updates include message queue index checking, backtrace log from signal handler, TLV to sync hardware clock, Type E base option, message pool for STFP payload, markers, and rxData, removed callback timer statistics.