

# Field Software Notice

To: **All 5100 P25 Conventional Users**  
Subject: **Software Release**

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Platform: **5100**  
Protocol: **P25 Conventional Only**  
Version Release #: **1.9 (039-5702-209)**  
Effective Release Date: **8/26/03**

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### *Minimum Requirements:*

|  |                                   |
|--|-----------------------------------|
| PC Configure: <b>1.20 or higher (023-9998-48820)</b> | ARM: <b>N/A</b>                   |
| PC Configure Code Upgrade Loader: <b>N/A</b>         | DSP: <b>N/A</b>                   |
| PC Configure Boot Upgrade Loader: <b>N/A</b>         | PC Flash: <b>N/A</b>              |
| Radio Boot Code: <b>N/A</b>                          | PC Tune: <b>1.0.8.7 or higher</b> |
| Other:   | PC Trunk: <b>N/A</b>              |

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### *Feature Additions/Enhancements:*

- Added OTAR Capability
  - Allow search backwards through site list in site search
  - Added support for transmission trunking on digital channels
  - Added UHF 380 support with even spaced test freqs. (Needs PCTune 1.0.8.7)
  - Added anti-cloning support (Need Pc Configure 1.20 and higher)
  - Assigned system-wide preferred site lists to announcement groups
  - Added DSP oscillator warp function
  - Added Conventional emergency signaling
  - Added AES support in software (non-FIPS-140-2 approved)
  - Improved ANI delay time
  - Made changes for display of Encryption
  - Option to ignore clear/secure switch when channel strapped
  - Programmable microphone audio levels
  - PC Keyloader Support
  - PTT-ID and Talkgroup display time programmable
  - Single Tone Encoder (Royal Canadian Mounted Police)
  - Soft power down – requires second button push to turn radio off.
  - SMARTNET/SmartZone Interconnect (analog clear / digital clear)
  - SMARTNET/SmartZone Securenet (group / private call)
  - Tone volume adjustable - function button and PC Configure
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## Fixes:

- Busy channel check bug fixed
- Dynamic Regroup Cancel and Clear Lock fixes
- Emergency Alarm failed fixes
- Fixed Fixed display refresh problem when Tx'ing in the middle of site search
- Fixed Digital Unit Call Lockup
- Fixed Unit Call lockup in call Cancel state
- Fixed Unit call ring tone volume (all protocols)
- Fixed low battery icon turning off when in Tx Busy
- Fixed RWS race condition lockup w/channel change
- Fixed surveillance mode backlight operation
- Fixed autoscan - will work if scan button isn't programmed, only activates if channel has enabled autoscan
- Fixed Unit Call Lockup
- Fixed "no audio" on Emergency Calls
- Fixed menu mode lockup
- Fixed System Wide Preferred Site bug
- Fixed lockup when turning off Radio Wide Scan
- Fixed call alert lockup in emergency
- Fixed lockup on rapid receive of 2 extended function commands
- Fixed radio hang up when loss of sync occurs during registration
- Ignore PTT during hot mic
- Indicate when emergency call received
- No Emergency Group programmed fixes
- Only display PTT ID and talkgroup ID on first reception in a call sequence – Doesn't display on subsequent receptions during the hang time
- Params fail fixed (caused when powering down in the middle of zone change)
- Reverse burst CTCSS was corrected from 90deg to 180deg
- Scan icon does not display if on dynamic regrouping channel
- Set registered RFSSID after a unit registration
- Transmit call type now follows clear/secure mode
- Will not allow scan of priority channel if active channel is analog active with CTCSS or DCS off the same frequency.
- SmartZone roaming fix without adjacent site OSW's
- Fixed lockup in SN
- Hot DTMF
- Emergency Alarm fixes
- Force scan off when dynamic regroup received
- Fix Full spectrum scan - Tx freq set incorrectly
- Restrict functions allowed in emergency
- P25 Trunking mute on loss of sync on voice channel
- fixed call alert
- Toggle switch zone select function
- P25 Conventional Signaling features
- More digital carrier squelch fixes

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## *Part Numbers Affected:*

## *Field Software Notice*

|               |               |               |               |               |
|---------------|---------------|---------------|---------------|---------------|
| 242-7780-302  | 242-7780-302A | 242-7780-302B | 242-7780-303  | 242-7780-303A |
| 242-7780-303B | 242-7780-502  | 242-7780-502A | 242-7780-502B | 242-7780-502C |
| 242-7780-502D | 242-7780-502E | 242-7780-502E | 242-7780-502F | 242-7780-503  |
| 242-7780-503A | 242-7780-503A | 242-7780-503B | 242-7780-503C | 242-7780-503D |
| 242-7780-503Q | 242-7781-302  | 242-7781-302A | 242-7781-302B | 242-7781-303  |
| 242-7781-303A | 242-7781-303B | 242-7781-502  | 242-7781-502A | 242-7781-502B |
| 242-7781-503  | 242-7781-503A | 242-7781-503B |               |               |

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*Notes:*

Not all fixes apply to all protocols.

**If you would like a copy of this software, please contact Sue Baldini at 800-328-3911, extension 6970.**

**For Technical Questions regarding this Field Software Notice, please contact EFJohnson Technical Support at 800-328-3911, ext. 2.**