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*************************************************************
KNG Firmware Releases
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Release KNG-Pxxx Portables            Ver. 5.1.0
        KNG-Mxxx Mobiles              Ver. 5.1.0
        KAA0660 Remote Control Head   Ver. 5.1.0
        KAA0670 Handheld Control Head Ver. 5.1.0

Minimum Neovision Editor KAA0732      Ver. 2.0.2
        Neovision ASK Editor KAA0735  Ver. 2.0.0
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Features

Conventional:
        DTMF live dial keypad programming
        Add priority scan period to keypad programming
        TX on last voted channel option
        Vote during repeater hang time
        PTT-ID disable timer
        Emergency alarm using non-MDC analog signaling
        Securenet DES CFB
        Provide TX power options

P25 Trunking:
        Unify crypto UI with conventional
        Attempt initial sync detection after phase wrapping for Phase 1 signaling
        Ultra Narrow Channel Filter
        Display site name when in intra-WACN roaming
        Dynamic regrouping encryption
        Priority scan beep
        Message update

Remote Control Head
        Support more than 2 remote control heads
        Monitor TX audio on non-transmitting RCHs

Miscellaneous:
        Index instead of copy for command zone channels
        Allow non-consecutive channels and zones
        Display key when TX secure selected
        Non-infinite key retention option
        Added up to 48 crypto keys
        Added Command zone channel assignment

Bug Fixes

Conventional:
        Vote scan w/o code guard fails to vote
        Improvement to Enhanced scan
        Noise burst on digital encrypted scan RX
        Issues using DES-CFB with an incompatible FIPSCOM
        Mixed mode emergency or call alert causes unresponsive state
        Mixed mode talkback won't work after receiving digital
        Incorrect busy channel lockout when scan active
        Unit call not working properly
        Call alert lockup under certain conditions
        MDC emergency call lockup
        MDC emergency alarm lockup
        MDC radio check lockup
        Lock-up when emergency alarm cancelled on RX-only channel
        UID not displayed during emergency alarm
        Emergency alarm behaves differently in Mixed and Analog modes

Incorrectly decrypted audio not muted
        Vote scan does not fully qualify carrier
        Vote scan degrades audio
        Legacy cloning improvements
        Picklists do not clone from either a DPHCMD or a GPHCMD over to KNG
        Off-hook scan doesn't work correctly

P25 Trunking:
        Potential of missing calls
        TDMA unit calls fail when radios are on different sites
        Potential of not hearing all 3 permit tone beeps
        Reduce time taken for roaming RSSI check
        Lower RSSI measuring time for all bands
        Emergency Hot mic audio
        DMS scan causes RX analog to indicate RX secure
        Priority on Selected Icon's don't reflect inbound traffic
        Emergency operation on composite control channels
        Harris NCR system compatibility Improvements
        TGID display not updating when busy expires in selected talkback

Remote Control Head:
        Pressing PTT on one control head enables transmit for all control heads

Handheld Control Head:
        Highlighted softkey moves randomly after TX

Dual Mode Scan
        Potential inability to transmit when DMS is on
        Dual mode scan edit list uses index as channel

Portable:
        Rapid cycling of on-off knob makes radio unresponsive

Mobile:
        Doesn't reset after writing parameters
        TX noise due to display backlight adjustments
        M800: always displays "source fault clear" on power up

Miscellaneous:
        Cannot reference channel 1
        UI lockup after downloading parameters
        parm loading abort due to channel ID list entry
        Radio displays keyfail with keys loaded
        OTAR - false reports of UKEK not loaded into radio
        KNG-PxxxS to KNG-xxxx cloning always fails
        GPHCMD fails CMD group clone to KNG
        When in Site menus, radio will not transmit

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Minimum Neovision Editor KAA0732   Ver. 2.0.0
        Neovision ASK Editor KAA0735   Ver. 2.0.0

Features

TDMA Support
TDMA: group regroup & dynamic regroup
P25 Trunking: OTAP read enhancement
P25 Trunking: Static SNDCP Data Registration
P25 Trunking: Forced System Reset
P25 Trunking: Enhanced Roaming
P25 Trunking: Roaming Notifications
P25 Trunking: Failsoft by Personality
Conventional: Add "radio name" display choice to programming/cloning
Add ability to display radio name/alias instead of UID
Make low battery warnings selectable
backlight toggle incompatibility
Make RCE crypto work with TDMA
Add trunked DTMF all-call alert to sentinel operation
Return to last active RX channel when exiting scan
Single button channel scan + priority scan
Make secure LED operation the same for trunking as it is for conventional
After Keypad select of 'Backlight off', backlight continues to operate for key presses
Automatically translate trunked call alerts for multiple unit IDs to DTMF alerts
Add AlgID + KeyID for RX of key not in alias table
Keypad programming should allow deletion of command zones
Picklist cloning should include Two-Tone, MDC and DTMF lists
Add call alert UI support on the HHCH
Change MDC encode features to allow hex input
Add MDC inhibit & uninhibit encode operation
Add HHCH speaker parameters to keypad programming
Conventional P25 call alert support for group addresses
MDC call alert & voice selective call encode
Display useful message if Warm-Start store key fails

Bug Fixes

Incorrect priority scan indicator
P25 Trunking: Lockup if improperly programmed
P25 Trunking: busy UI state not updating properly
P25 Trunking: Group Regrouping Denies in Australia
P25 Trunking: Site Search soft key assignments incorrect
P25 Trunking: dual mode scan nuisance delete bugs
P25 Trunking: site affilliation display incorrect
P25 Trunking: False PTT
OTAR: KMM responses aren't sent while scanning
Dual Mode Scan: Lockup when turning scan off/on while receiving/transmitting
Dual Mode Scan: Speed up conventional scanning
Dual Mode Scan: Errors when removing all trunking channels from list
Conventional: Scan lockup
Conventional: scanning quits
Conventional: channel busy fails when set to status symbol
Conventional: RX is interrupted by unit call selection
Conventional: priority conv scan lockup
Conventional: TX 2-tone w/ tone B = 0 causes TX lockup
Conventional: 2-tone TX menu item cut-off on portable
Conventional: priority scan failure
Conventional: PRI 1 takes too long to override PRI 2
Conventional: secure strapped revert emergency call keyfail lockup
Conventional: scan deactivation causes icons to stick
Conventional: busy channel lockout fails for digital
Conventional: encryption LED fails during scan
Conventional: NAC picklist shows empty entries

Conventional: simultaneous cloning causes lockups
Conventional: cloning failure causes lockup
Conventional: keypad programming prohibits TGID=0
Conventional: zone scan fails on non-sequential zones
Conventional: RX mode icon wrong if RX dequalifies
System calls causing mobile sluggishness
Flashing the radio with all 5 images causes splash screen to stick
Mobile menu can get stuck
Busy channel lockout (carrier) failure with active channel
SLN=0 causes various problems
GPS coordinates not displayed properly
TX secure behaves erratically
P800 always aligns RSSI scale to the same number
Sentinel DTMF ID of 0000 results in indefinite tx
Manual two-tone signaling causes transmit stick on the mobile
Conventional data messages do not check receive mode
Offhook scan enable should be made independent of the offhook monitor option
Disply of my own UID is not always correct
Radio goes into Monitor Mode inadvertently
If System Priority and Zone Priority point to the same channel, Priority doesn't work
MDC signal causes transmit stick
Failed P25 call alert "OK" button leaves you in a menu you cannot escape from
Digital RX causes unqualified UI indications after end of message
Voice mute icon does not always display for automatic voice mute
Backlight during scan comes on more often than it should
Enabling conventional scan and dual mode scan at same time
Priority scan fails if Pri1 is system-based
Encryption will do a "Key Fail" with tone on first PTT only


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KNG Firmware Releases
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Release Portable/ Mobile   4.6.2
        Control Head/ HCH   4.6.2

Minimum Neovision Editor Rev.   1.5.0

Features

P25 Trunking - Dynamic Regroup
Display MDC ID's as decimal as an option
Support MDC group, fleet & wildcard addressing
Support long block MDC
Enable ID alias lookup for MDC signaling
Stop premature low battery during TX with IS pack
No keypad editing lockout for call list picklist
Rapid scroll feature needs to be added to trunking
Add Clear Tx Beep to Mixed Mode Analog Tx
Add mobile accessory output option for transmit indication
Automatic voice mute per-channel
Add alternate display line options
Talkaround optionally applies on a per-channel basis
Allow command zone channel add feature to work with trunking channels
Add a way to monitor GPS statistics through the USB
DMS: Speed up OOR scanning; implement OOR icon
Add support for Motorola wide pulse modulation
Make voice mute operation per-channel instead of per-zone
Add ability to rapidly scroll through long menu
Remember last channel of each zone during zone change
Improve AMBE noise cancellation

Add use group key for unit call and make it default to true
Beep when Priority goes active
Portable: Soft Power Down
Portable: Toggle Switch Zone Select

Bug Fixes

Correct MDC voice mute operation to account for long block packets
Green LED operation is not consistent in Voice Mute
MDC ANI can cause ID = 0 display if MDC voice mute is enabled for the ANI ID
MDC Unit ID reappears after Monitor Mode is changed from open
ID display during scan hold does not work if MDC is sent at end of TX
P25 Trnk - Priority on Selected not initialized after download
P25 Trnk - Unit Call denied by FNE
P25 Trk - Unit Call Accept button doesn't work
P25 Trk - Radio displays "Emergency" when transmitting
P25 Trk - Dual Mode Scan lockup
P25 Trk: Cassidian systems cause radio to group affiliate to 0
P25 Trk: TG busy indication doesn't work on older Harris systems
OTAR: Deleting last TEK in radio causes response KMM to fail
OTAR: Radio doesn't always deregister during scan
Incorrect KEK can cause OTAR Registration to fail when it shouldn't
Off-hook settings for Scan depends on Off-hook setting for Monitor
Priority scan on digital channel can cause infinite scan hold time
Powerup zone should be last zone not toggle switch zone
A radio with Talkback Scan enabled can transmit a TGID of 65535
RXA with code guard causes RXA Icon to stick until channel changed or power cycle
A new channel added through keypad programming doesn't show up until a zone cycle
Keypad programming display lines can be navigated even when locked out
Mobile backlight only goes from off to on if the soft keys are pressed
Keypad programming unit call alias cuts off on the mobile and control head display
Toggling channel scan disables secure transmit
Key fail display prevents rapid channel changes
Zone scan cannot be changed while scanning
Smart-mic backlight will not turn-on
P25 Trk: Harris County/City of Houston zone overlap issue
DMS: Out of range radio won't scan to conventional channels
DMS List Edit - View option doesn't display some channels
Toggle switches can be ignored during unit call RX

Release Portable/ Mobile   4.5.0
         Control Head   4.5.0

Minimum Neovision Editor Rev.   1.4.19

Add   Support for Mobile GPS option
Add   Home channel button assignment
Add   Channel Number + Zone Label display line selection
Add   Dual Mode Scan List user selection
Add   DTMF decode on digital channels (Voice Mute)
Add   Mobile I/O support for COR on trunked systems
Add   Mobile display dimmer
Add   Trunking wide area single site support
Add   Allow Vote scan list selection

Enhance Additional keypad programming functions
Enhance Show/Hide own Unit ID when Unit ID is programmed as display item
Enhance Allow squelch adjustment per channel
Enhance Legacy cloning operation
Enhance Expanded two-tone notification timing
Enhance Trunked preferred site operation

Enhance OTAR: Multiple group RSI support

Fix   Changed preset squelch value to allow audio at lower signal level
Fix   Allow Tx/Rx while in menu operation

Release Portable/ Mobile   4.4.0
          Control Head   4.4.0

Minimum Neovision Editor Rev.   1.4.17

Add   MDC Support
Add   Command Zone Operation
Add   Messaging Capabilities
          Text Messaging
          User Status Messaging
Add   Paging and Call Alert
          Two-Tone Paging
          DTMF Paging
          MDC1200 Paging
          Call Alert Paging
          Radio Check
Add   Radio Inhibit/Uninhibit
Add   Enhanced Lockout Feature Set
Add   Auxiliary Input/Output Functions for mobile

Release Portable/ Mobile   4.02.16
          Control Head   4.02.11

Minimum Neovision Editor Rev.   1.4.15

Add   Display 'Call Alert Successful message
Add   P25 Trunk Unit Call messages
Add   Conventional scan preamble for TSBK ISPs and Data
Add   RCII Diagnostic Send ISP capabilities
Add   Allow RX audio while in sub-menus
Fix   Conventional emergency channel selection
Fix   Talkback encryption key
Fix   Disable battery monitor during transmit
Fix   OTAR MAC calculation interference with conventional channel encryption
operation

Release Portable/ Mobile   4.02.15
          Control Head   4.02.11

Required Neovision Editor   1.4.12

Fix   Site trunking to wide area trunking transition

Release Portable/ Mobile   4.02.13
          Control Head   4.02.11

Required Neovision Editor   1.4.12

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Add      Conventional OTAR capabilities
Fix      Trunking OTAR: Reestablish key conditions once radio is rekeyed
Fix      Minnesota Trunking: Inhibit after an emergency fix


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Release 4.02.12
Required Neovision Editor       1.4.8

Add      Add wait/add identifiers if not present during control channel validation
Enhance Status Update Enhancements
Fix      Radio displays DSP Error 1 after NeoVision download/power cycle.
Fix      Trunking Scan Lockup
Fix      Harris P25 Trunking: OTAR Registration


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Release 4.02.08
Required Neovision Editor       1.4.7

Add      Keyset Select assigned in menu and button
Add      DSP: Add eeprom protection
Add      Mobile: Add backlight level menu settings
Add      P25 Trunking Emergency Call Cancel
Add      Trunking Unit Call without availability check (Harris)
Add      Trunking OTAR Option ability
Add      Mobile: Add fixed MENU softkey on right side of display
Enhance          Mobile soft button indication that feature is on
Fix      Autoscan UI issue
Fix      Trunking Emergency Alarm use emergency group instead of current working
group
Fix      Trunking early receive LED not turning off in all cases
Fix      P25 trunking group call audio opens slow
Fix      P25 Trunking: Source ID of zero slows audio open speeds of unit call and
group re-grouping calls
Fix      P25 Trunking: Group call unit ID of 0 displayed
Fix      Unwanted transmission after power-on with PTT held.
Fix      P25 Trunking: earlier LED illumination for group calls
Fix      P800 and M800 improve RX hum and noise.
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