



FIELD SOFTWARE NOTICE

Viking Subscriber Software 21.1 General Release

Effective Release: December 20, 2021

FSN-1221-VIKING-21

This Field Software Notice (FSN) announces the KENWOOD Viking® subscriber software version 21.1 release. This release provides new features and resolutions for Viking radios, including new a Multi-Band feature for VM7000 multi-deck radios. This release supersedes KENWOOD Viking software release 20.2 for VPx000 and VMx000 series radios and the Armada Software Suite.

NOTE: The general release for 20.1 and its subsequent maintenance updates will remain the current release for VPx00 and VMx00 radio firmware (8.30.x version levels). Most new features are not being extended to the 100 series radio platform after this release cycle, however minor changes may continue to be supported as incremental releases to 20.1 for these radios. See incremental 20.1 point release notes for further details. Armada continues to support the VPx00/VMx00 radios.

Software Versions

The following table capture the Viking Software items and corresponding versions included in this release.

Item	Version
Armada Client	1.34.9
Armada Server	1.34.9
Armada Proxy	1.34.2
Armada CD ISO	1.34.9
VP5000/6000 Firmware Image	8.34.9
VM5000/6000/7000 Firmware Image	8.34.9
VikingTune Lite	1.34.6
Data Registration Server	1.32.0
Elite Battery Management Server	1.24.0
Location Gateway	1.8.0
OTAP Server	1.34.0
Text Message Server	1.20.1

Features Added

Following new features are added in the 21.1 release.

Feature Description	Overview
VM7000 Multi-Band Mode	Multi-Band Mode is a new optional feature that can be applied to VM7000
	Multi-Deck mobiles for enhanced operation.
	Up to 3 different frequency decks within a VM7000 Multi-deck may now be
	grouped together to act as a single Multi-Band radio. This allows seamless roaming between P25 Trunking sites in different frequency bands within the
	same RF Subsystem (a.k.a. a Hybrid system) as well as now allowing scan lists
	with multiple bands within the same list. The grouped radios present the system with a single radio ID rather than individual IDs, and may now be OTAP
	programmed over any frequency band within the grouping.
	Please note that certain features are not available for the Multi-Deck Multi-Band
	group including: IRR/Audio Recording, Cross-Band Repeat, VIAVI or Freedom Auto-tune, Third Party Interface for consoles, Bluetooth, or Firmware update
	over OTIP. Simultaneous reception Rx audio is also not available from the
	different bands in grouped decks, only the active receiving band.
	For further information, see the "VM7000 Multi-Deck Multi-Band Quick Start
	Guide" and the Viking Mobile Installation and Operations Manuals. Remote technical support assistance with converting your existing VM7000 Multi-Decks
	to use Multi-Band mode may be obtained with purchase of support option
	299CONVVM7K.
BCD Remote Channel	VMx000 mobile radios now support the configuration of 4 general purpose I/O pins on the DB25 connector to accept input for channel steering between 15
Control for mobiles	channels from an external controller.
Current Site Display	On P25 Trunking systems, the radio display can be configured to show the currently affiliated site in the status bar. The site ID will be displayed or site
Current Site Display	Alias, if assigned. Site Alias will be truncated to 5 characters.
Backlight Control for	The KMC-66M keypad microphone can now be set to follow the backlight state
Keypad Mic Display RSSI function in	of the VMx000 mobile control head backlight mode. A button can now be programmed to display the received signal strength in dBm
Conventional	while a call is active.
Day Channal Carrier	The threshold for detecting carrier signals on conventional analog channels is
Per Channel Carrier Squelch Adjustment	now adjustable on a per-channel basis versus per-system basis. Available to set per-channel in Armada or optionally via use of a button/menu item for the user
•	to also control.
Radio Inhibit Control in Conventional	Allowing use of Radio inhibit on Conventional systems is now configurable.
UHF 380-470 extended	A new software option is available for use in the Australia/New Zealand region to enable an operational extension for up to 477.4250 MHz in analog
band - Australia/NZ	conventional mode for fire service interoperation with Citizen's Band radio.

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Feature Enhancements

The following feature enhancements are available in the 21.1 release. These augment existing functionality in the subscribers and/or supporting applications.

Feature Description	Overview
Armada Fleet Window Enhancements	 A new column is available in the Armada Fleet map window to indicate problems and severity for Templates and Codeplugs. The column also supports sorting and filtering. The fleet window in Armada now shows the number of Templates or Codeplugs currently selected. Under Templates, a new "Linked Radio Count" column is available to display how many radios a Template is linked to. A new text search box allows filter of Templates or Codeplugs by the entered search text. New filters for connection status have been added to the Codeplugs tab for local client or remote client connection (remote via Armada Server).
Icon enhancements	 An icon has been to indicate "TalkGroup Lock" status in addition to the flash message. An icon has been added to indicate when receiving a Unit Call.
Microphone Audio Profile enhancements	 Armada now offers ability to enter the Mic gain levels in 1dB steps. Digital Mic levels will default to 0dB for new or reset profiles. If selecting a mic preset that has a preferred gain level, it will be applied to all 4 mic levels.
Single Touch Enhancements	 Single Touch functions can now be optionally configured to be activated with a simple button "Press" as well as "Press and Hold" activation. Single Touch Call Alert is now supported on Conventional Analog channels.
Copy & Paste Enhancements	 Armada now allows copied Menu and Button functions to be pasted to multiple systems simultaneously. New Copy and Paste capability for Hardware and Software Key Mappings. New Copy and Paste capability for P25 2-Tone Encode/Decode tones.
Display Enhancements	 Radios will now display both Zone and Channel when the user changes Zone or Channel. Which item changed will be shown on top and is highlighted by a larger font size. If using a button to activate Instant Recording Replay, the call info Source/Destination ID, Call Type, and Timestamp will now be shown on the main display. The received call Rx Info will now be displayed for the display time set in Armada regardless of when the call ends. If "Infinite" is selected for an Rx Info item, it will display for a minimum of 1 second regardless of when the call ends. When the "Cycle" setting is enabled for Rx Info, the chosen Rx messages will cycle through at least once.
Programmable Status Indications enhancements	 A "Data Failure Indication" option has been added to P25 Systems Data Services. "Reg Status Indication" has been renamed "System Access Indication" for clarity. The "Site Trunking Indication" has been changed from checkboxes to a dropdown option list for clarity.

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Feature Description	Overview
Priority Scan List Edit enhancements	Navigation changes have been made for easier editing of scan lists with numerous channels.
List management enhancements	 You can now directly add a Home or Foreign Announcement Group to the Announcement Group List, versus having to add then edit the system parameters. Radio Wide Scan Lists (RWS) can now be assigned aliases, which will be displayed in Armada and on the radio when selecting a RWS list.
Event and Audit log view in Radio Properties	An Event log and Audit log are now visible from the radio properties dialog in Armada.
Custom Tx Power Levels on Portables	VP5000 and VP6000 now support Custom Tx Power levels. This feature was previously only available on Mobiles.
Emergency Keep Alive	If "Emergency Keep Alive" is enabled, the radio will not shutdown while Emergency is active.
OTAP Retries	Armada will now retry OTAP operations up to 2 times, 1 hour and 4 hours after initial retry failure. Applies to read/write and security policy updates.
Cancel Deregistration Retries	Pressing PTT or Press and Hold of the PTT button will now cancel deregistration retries on P25 Trunking channels.
P25 Conventional Interconnect	Phone Interconnect support has been added for P25 Conventional Digital Channels with the "Phone Access Code" allowed as selected from the Phone Access Code List or "None" if unused.
Location Services (GPS) Enhancements	 A new "Trigger Data Mode" allows configuration of triggered location reports to be sent in either unconfirmed or confirmed data mode. New Trigger types for reporting location on "Power On" and "Power Off" have been added.
AFC on by default	Automatic Frequency Correction (AFC) is now enabled by default.
Test Mode Enhancements	 RSSI will now be displayed along with Bit Error Rate in the BER Test portion of Test Mode. A Variable Frequency Operation (VFO) Test has been added.

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Customer Issues Addressed

Following is a list of the customer impacting issues that have been resolved in the 21.1 release.

Issue	Overview
VIAVI Auto Tune Issues	There were several issues corrected with Viking subscribers and VIAVI auto tuning. If users will be using VIAVI test equipment for tuning Viking Subscribers they should update to this release.
TX Timeout on mobiles in EVRS	The TX Timeout timer has been enabled in mobiles in EVRS configuration to prevent a potential issue with getting stuck in Tx. The Tx Timeout Timer in both the mobiles and portables in EVRS configuration should be set the same.
Data registration status mismatch under idle constant-Tx base stations	The Data registration status shown on the radio display may no longer be correct if remaining idle for long periods under constant-TX base stations. Viking radios registered for data services (OTAP, etc) now attempt to reregister after the SNDCP standby timer expires.
Missing seconds of dispatch audio at Emergency Call Alert	A correction was issued for a problem where the radio may miss the initial few seconds of dispatch audio after it enters Emergency and emits the Emergency Call Alert.
Issue in Radio Setup Mode	If users have Internal GPS or Bluetooth enabled and enter the Radio Setup Ignition Sense menu on a remote control head, the subscriber may crash. This issue has been fixed in this release.
Pause in Rx Audio due to confirmed data packet Tx retry	In some rare cases where Viking subscribers send confirmed data packets to the system and then start receiving a voice call before getting an acknowledgement data packet, the subscriber may mute receive audio and retry the confirmed data packet. This could cause a short gap in the receive audio. This issue only impacts applications that use confirmed data. This issue has been addressed in this release.

For questions regarding this Field Service Bulletin, please contact the KENWOOD Viking team at 1.800.328.3911, option 3.

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