

Viking Subscriber Software 20.1 General Release: July 2020

Effective Release: July 13, 2020

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This Field Software Notice (FSN) announces the KENWOOD Viking® subscriber software version 20.1 release. This release provides new features and resolutions for Viking radios. This release supersedes KENWOOD Viking software release 19.2.

Software Versions

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

Item	Version
Armada	1.30.9
Armada Proxy	1.30.7
Armada CD ISO	1.30.9
VP600/900 Firmware Image	8.30.9
VM600/900 Firmware Image	8.30.9
VP5000/6000 Firmware Image	8.30.9
VM5000/6000/7000 Firmware Image	8.30.9
VikingTune	1.30.6
VikingTune ISO	1.30.6
VikingTune Lite	1.30.6
VikingTune Lite ISO	1.30.6

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

Features Added

Following new features are added in the 20.1 release.

Feature Description	Overview
Armada Proxy	The new Armada Proxy service allows an Armada Client to connect remotely to a radio over the network through a local PC. Armada can perform all operations on the remotely connected radio that it can perform on a locally-connected radio. Armada Proxy simply acts as a pass-through for messages between the radio and the Armada Client. Armada Proxy runs as a service, so it does not require a user to log in and start it on the local PC.
Dynamic Group/Regrouping MFIDA4 (Harris)	This feature implements support of the P25 TIA specification MFIDA4 (Harris) version of patching and super-grouping (a.k.a Simul-Select) that was not previously supported in Viking subscriber radios. The Harris standard allows for two types of patches: Two-Way Patches and One-Way Simul-Select Patches, the latter of which can regroup radios based on Talkgroup or Unit ID. Specification TIA-102-AABH defines the functionality for these patches.
Cross Band Repeat for VM7000 (conventional)	The Cross Band Repeat software option for the VM7000 Multi-deck allows the received signal from one RF deck to be transmitted on a second RF deck. This repeat function is only available for analog or digital conventional channels, not for trunked channels. This software option may be purchased with the radio or added later. Requires an additional DB25 cable connection between the chosen decks, either a DB-25 null-modem for digital channels in repeat mode or a custom cable if at least one of the channels is analog.
Keypad DTMF for P25 Trunking	If “Keypad DTMF” is enabled in Armada for a P25 Trunking channel, the user can send DTMF tones by holding PTT and pressing the keypad buttons.

Feature Enhancements

The following feature enhancements are available in the 20.1 release. These augment existing functionality in the subscribers and/or supporting applications.

Feature Description	Overview
Quick-Call II Tone decode	Quick-Call II format compatible tones are now supported. Note: The “P25 2-Tone Paging Decode and Encode” software option must be enabled in the radio for this and the following 3 feature enhancements.
Expanded P25 Two Tone Decoder Lists with alias	Up to 64 different two tone patterns can now be programmed in each list and can be identified with an alias, which will be displayed when decoded. The tone pattern frequencies can now also be explicitly specified.
P25 Two Tone “List Select” feature	This feature allows the user to select a different decode list for the selected channel at any time. This list select is also available under conventional analog. The radio can also be programmed to not allow the user to change the decode list per channel.
Two Tone Decode with Horn Alert	Horn honk can be activated if a Two-Tone page is received.
Horn Alert Activation Control	The user can now choose which feature combinations will activate horn alert: Call Alert, Interconnect Call, Two Tone decode, and/or Unit Call. Horn alert can also be selected to always be enabled on radio power up, rather than defaulting to its last state.
Radio-Wide Scan Nuisance Delete	Allows nuisance delete of scanned channels while in radio-wide scan mode.

Feature Description	Overview
Nuisance Delete and Scan Edit	Scan Edit can now be used after a Nuisance Delete. A channel which has been nuisance deleted will be marked (N) and can be added back to the scan list using the scan edit menu.
List Alias for Scan Lists	Priority Scan Lists now can be named in Armada with a List Alias. These aliases will be visible on the radio when using the Scan List Select and Scan List Edit functions.
Interconnect Calls - User Interface improvements	The radio's user interface has been modified so P25 Trunking Unit Calls and Telephone Interconnect Calls can be answered or rejected with ease. The radio will temporarily change the functions of the soft buttons in order to make answer and reject options readily available.
Customizable A/B/C/D Toggle programming	The A-B-C-D toggle switch on Viking portable radios can now have individual positions each programmed to a different function, which are toggled on/off per position. Positions left unprogrammed act as feature "off" positions.
ANI per channel vs per system	The ANI settings are now available on the channel tab instead of just the system tab in Armada. ANI settings can now be set on a per-channel basis, or else the channel can still be selected to follow the system setting. This eliminates the need for setting up separate conventional systems for different ANI types.
Erase Keys in Test Mode	A new entry in Test Mode performs the same operation as the "Erase Keys" menu function. Hardware and Software encryption keys will both be erased.
Volume Knob feature additions	Disabling of the volume knob can now be controlled explicitly in Armada rather than being disabled based on what function buttons were assigned or because of accessory attachment. Volume ticks can now be set to as low as 2 steps. The volume tick range is now 2 to 50 with the default at 10.
Support for Otto Bluetooth Revo NC2 Mic	Allows accessory selection as the OTTO Bluetooth Revo NC2 Speaker Mic in Armada. This support provides ability to program the desired function for the red "emergency" button from within Armada.
Bluetooth connection voice announcement	Radios can now be programmed to play a voice announcement when a Bluetooth device is connected or disconnected.
Attach to Hidden Wi-Fi networks	Radio will scan for networks programmed as "Hidden", e.g. not broadcasting an SSID. This should be selected when the user needs to connect the radio a hidden network.
VM7000 Multi-deck Multi-Radio Emergency	This enhancement adds the ability for unselected decks to enter emergency state also when emergency is activated on the selected deck (or the designated emergency deck, if one is designated.)
VM7000 Multi-deck Mute Status Save	The state of "Mute Unselected RF Decks" is now saved through a power cycle.
VM7000 Multi-deck Firmware Update Stop	The "STOP" button will no longer be enabled for firmware updates to VM7000 multideck groups in Armada. All transceivers in a multideck group should receive an update once the process has begun.
Priority Announcement Group	Subscribers with this feature enabled will leave an ongoing Talk Group call to go to a new call if they receive an update indicating that a call involving their current Announcement Group is active. Typically only applicable for use on systems which do not tear down the TG call before starting an AG call.
Data Services Hold Off Timer	A programmable P25 Trunking timer is now available to specify how long after affiliation the radio will hold off on performing data service requests.
Armada Re-Export Changes	Out-of-date radios are now cleaned up from the .aep data file if the template they were linked to was updated and they had become unlinked.


Customer Issues Addressed

Following is a list of the customer impacting issues that have been resolved in the 20.1 release.

Issue	Overview
Audio May Not Automatically Route to Radio After Disconnecting Bluetooth Device	<p>When disconnecting or powering down a Bluetooth microphone that was connected to the subscriber, audio may not be routed back to the subscriber speaker. If disconnecting a Bluetooth microphone results in no audio playing from the subscriber speaker, perform the following test:</p> <ul style="list-style-type: none"> • Navigate to the Bluetooth menu • Enter the "Recv Audio" sub-menu • Select "Radio Spkr" <p>If doing this restores audio over the subscriber speaker, then upgrading firmware to this latest version is recommended to correct the issue.</p>
Audio May Remain Unsilenced After A Digital Call If Mic Is Off Hook	<p>If a mobile radio is programmed for Hangup Box Monitor and a digital call is received OR initiated while the microphone is off hook, the audio may become unsilenced and indefinitely play static after the call ends. The speaker should now properly mute with this version firmware.</p>
"Requesting Unit Active in Other Service" (Harris systems)	<p>In the case where subscriber site affiliation changes are not properly identified by the system with a Talk Group change between rapid subsequent PTTs, the system may send an "Requesting Unit Active in Other Service" busy response. Previously, the Viking subscriber's busy timer would prevent PTT until the timer expired. Now, when receiving this busy response from the system, the user can release PTT and instead immediately attempt another transmission without a timer delay.</p>
Subscribers Will Now Attempt Registration After Being Detached (Harris systems)	<p>P25 Trunking supports a feature to tell individual subscribers to leave the system. This feature is called "detach". The P25 Standard does not specify whether a subscriber should attempt to re-register after being detached. However, some system providers may detach a subscriber without first checking to see if it is still active. Viking subscribers will now attempt a full registration after being detached in case of this system scenario.</p>
Subscriber Not Powering Up with Previous Volume Setting	<p>In the case users had volume function buttons programmed on their speaker mics and when the subscriber was powered off and then on, the volume level was reset to 0. This firmware version allows the subscriber to power up set to the last volume.</p>
Subscriber May Use Wrong Encryption Key When Scanning to A MFID90 Supergroup Call	<p>If the selected group is not in a supergroup, but the radio scans over to a group which has been regrouped and the user attempts to make an encrypted call on the scanned group, the radio was using the security settings/encryption key of the scan channel, instead of the Patch Key specified in Armada. The radio should now use the Patch Key.</p>
Trunking Call Alert Tone is Cleared by Received Calls	<p>When a radio in Trunking (Viking16 or P25) receives a Call Alert, the radio plays an indication tone to notify users. If the radio subsequently received a voice call, it would stop playing the Call Alert indication tone. This may cause a user who was away from their radio to be unaware that they received a Call Alert. Changes have been made to keep the tone indication playing until the user PTTs or presses the Clear function button.</p>

Hardware Inter-dependencies

The following lists dependencies between this software release and particular subscriber radio hardware.

Subscriber Radio & Hardware	Dependency
VP900 with new PLL circuit	Support for VP900 subscribers with new PLL hardware was introduced in 8.28.x. Armada will no longer allow VP900 subscribers with this hardware to downgrade below that firmware version.
VP900 with new top LCD display	<p>VP900 subscribers with new top LCD display electronics require version 8.28.7 or later. Armada will no longer allow new VP900 subscribers with this hardware to downgrade below that firmware version. If an older firmware version or an incorrect configuration has been made for the top display, it will appear as shown here:</p>  <p>Radios in this state should be upgraded to firmware version 8.28.7 or later. If in the unlikely scenario that a radio having the new top display and the latest firmware has also been mis-configured for the old top display, this display configuration can be corrected by changing the associated option in Tune/Test mode of the radio.</p>

Accessories List

The following table contains the list of accessories newly supported in the 20.1 release.

Name	Picture	Description
OTTO Bluetooth Revo NC2 Speaker Mic		<p>The OTTO Bluetooth Revo NC2 speaker microphone can be connected via Bluetooth to VP5000/6000 series portables and VMx000 series mobiles. It features a programmable top button, and is ruggedized for public safety use.</p> <p>Note: The OTTO Bluetooth Revo NC2 speaker mic is offered by OTTO Engineering. Please consult the operating manual and quick start guide provided with the speaker mic to pair and use the device. Please confirm operation of your OTTO speaker mic before deployment to end-users. Additional support is available through OTTO.</p>