



# North Carolina State Highway Patrol

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Technical Services Unit/VIPER

1 January 2026

## Notice of Approved Vendor Radios for use on North Carolina VIPER Statewide Radio System for the period 1 January – 31 December 2026

The following Vendors and their respective listed Radio Model Numbers are hereby approved for **NEW** radio purchases. NEW is defined as a currently manufactured radio, that includes TDMA (Phase II operation), directly from a manufacturer or authorized vendor/manufacturer's representative.

Manufacturer	Portable		Mobile	
Motorola	APX 4000	APX 6000	APX 1500	APX 4500
	APX 8000	APX NXT	APX 6500	APX 8500
	APX N70	APX N50	APX 8500 Consolette	
	APX N30			
Kenwood	VP5000	VP6000	VM5000	VM6000
Viking/EFJohnson	VP8000		VM7000	VM8000
L3Harris	XL-45P	XL-95P	XL-85M	XL-185M
	XL-150P	XL-185P	XL-200M	
	XL-200P	XL-400P		
Tait	TP9400	TP9600	TM9400	TM9900
	TP9800	TP9900		
BK Technologies	BKR9000		KNG-M800	

The above list of radios is for radios currently in production and being shipped during the calendar year 2026. However, virtually all the above manufacturers have radios that are P25/Phase 2 capable that are no longer in production.

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VIPER will continue to allow end user agencies to add radios from the below list as they are P25 Phase 2 (TDMA) capable, so long as they are properly optioned.

<b>Manufacturer</b>	<b>Portable</b>		<b>Mobile</b>	
Motorola	APX 900	APX 1000	APX 7500	
	APX 4000	APX 7000	APX 7500 Console	
Viking/EFJohnson	VP400	VP600	VM400	VM600
	VP900		VM900	
L3Harris	XG25P	XG-75P	XG-100M	M7300
	XG-100P			
BK Technologies	KNG-P800			

Finally, all end user agencies should be aware that as of **1 January 2023, ALL RADIOS BEING ADDED TO VIPER must be P25 Phase 2 (TDMA) ready, and as of 1 July 2025 all radios operating on VIPER should have proper TDMA programming.** Ready is defined as the radios MUST have the TDMA option already in the radios at time of purchase. This includes the purchase of **NEW and USED** radios.

**\*\*NOTE\*\***

VIPER previously notified all users that effective 1 January 2020 that **radios that are not TDMA Capable will no longer be permitted TO BE ADDED to the system.**

The following Vendors and their respective listed Radio Model Numbers **are no longer approved** for use on the VIPER system regardless of where they are purchased from or how they are acquired by the end user/agency.

- **Kenwood** – The Kenwood NX series radios are **no longer approved** for use on the VIPER network. \*\* See below section regarding Encryption and Key Loading\*\*

For vendor specific questions, please direct inquiries to the respective vendors. For VIPER system specific questions, please email: [viper@ncshp.gov](mailto:viper@ncshp.gov).

Radio end user agencies should note that this letter is for approved radios for use on the Statewide VIPER radio system and does not constitute an approval of the above radios on locally owned and operated Project 25 (P25) radio systems. Some radios on the VIPER approved list may NOT be approved for use on local systems. Please confirm with your local radio system administrators to determine local eligibility and approval.

**Encryption** – With the overwhelming number of agencies across North Carolina that are implementing encryption along with the adoption of a statewide encryption plan that includes all the nationally recognized encryption formats (ADP/ARC4, DES and AES), the VIPER system

has created a series of Common State Keys for encryption that reflect all the above encryption formats. The state has also adopted a set of Law Enforcement Only State Event Talk Groups that require the use of the Common State Keys and Agency Specific Keys. NC SIEC has recently adopted a position of strongly recommending migration to a standard of AES-256 encryption; If you intend to purchase radios with encryption capabilities, please ensure that you are purchasing this option. The Common State Keys are available to any agency that utilizes encryption and can be transferred via a Motorola KVLx000 series Key Variable Loading Device. The Motorola KVL is the de-facto standard for Key Fill Devices. If you require the Common State Keys, please email [viper@ncshp.gov](mailto:viper@ncshp.gov) and put CSK in the subject line.

With the adoption of the Common State Keys, VIPER has elected to place an additional requirement on all radios being sold for use on the VIPER system, therefore any manufacturer that is unable to support the key loading all of the above algorithms (ADP/ARC4, DES and AES) via KVLx000 device, shall have their radios removed from the approved radio list effective 1 January 2023. This action will not preclude any manufacturer from being added back to the approved list should they be able to meet the above requirement in the future. Additions back to the approved list will occur at such times that the Approved Radio List is normally updated. Currently this occurs every January first of the upcoming calendar year however the state reserves the right to update the list at any time that it deems to be in the best interest of the state or the end users that it supports

**Summary** – None of the above actions taken by the state should be construed as forcing end users to discontinue the use of radios **currently activated** on the system HOWEVER all end users should have a clear understanding that the deadline for conversion of the VIPER system to TDMA (Phase 2 P25) operation **was 1 July 2025**. On 1 July 2025 Dynamic Dual Mode (DDM) was enabled on all talkgroups on the VIPER system. Several counties/agencies have requested their talkgroups be switched to TDMA operation(s) only and are currently operating exclusively TDMA. NC SIEC has released critical dates that outline migration of Statewide talkgroups to TDMA only operation(s).

**VIPER bears no responsibility whatsoever for end users who have failed to upgrade their radios and consequently miss traffic on TDMA only talkgroups. All risks associated with this failure to upgrade rest solely and entirely with the end user/agency.**

**As noted above/previously communicated, over the next eighteen (18) months all non P25 capable radios shall be removed from the system.**