



# North Carolina Department of Public Safety

## State Highway Patrol

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Roy Cooper, Governor  
Eddie M. Buffalo, Jr., Secretary

Freddy L. Johnson, Jr.  
Commander

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Technical Services Unit/VIPER

1 January 2022

### Notice of Approved Vendor Radios for use on North Carolina VIPER Statewide Radio System for the period 1 January – 31 December 2022

The following Vendors and their respective listed Radio Model Numbers are hereby approved for **NEW** radio purchases, purchased through an authorized dealer and/or direct from the manufacturer. NEW is defined as a currently manufactured radio, not one that is NEW, old stock but no longer in production.

**Motorola** – APX 900/4000/6000/8000/NXT portables, APX 1500/4500/6500/8500 mobiles and APX8500 series consolettes.

**EF Johnson /Kenwood**– EFJ VP5000/VP6000 portables and VM5000/6000/7000 mobiles. Kenwood NX5000 series portables and mobiles.

**Harris/ TAIT** – Unity XL-45/95/150/185/200 portables, XL185/XL200 series mobiles. XG-25/75 series mobiles.

**TAIT** - TP9400/TP9600 portables and TP9400 mobiles.

**BK-RELM** – KNG- M800 series mobiles.

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The above list of radios is for radios currently in production and being shipped during the calendar year 2022. However, virtually all the above manufacturers previously manufactured radios that are P25 Phase 2 capable that are no longer in production. VIPER will continue to allow end user agencies to add radios from the below list since they are P25 Phase 2 (TDMA) capable.

**Motorola** – APX 1000/7000 portables, APX 7500 mobiles and APX7500 series consolets.

**EF Johnson /Kenwood**– EFJ VP400/600/900 portables and VM400/600/900 mobiles. Kenwood TK-5410 series portables.

**Harris/ TAIT** – Unity XG25/75/100 portables.

**BK-RELM** – KNG- P800 series portables.

Finally, all end user agencies should be aware of the upcoming requirement that **effective 1 January 2023, ALL RADIOS BEING ADDED TO VIPER must be P25 Phase 2 (TDMA) ready.** 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 the following radios listed below **will no longer be permitted TO BE ADDED to the system.** **Existing radios** from the below list will continue to be allowed to operate on the system **until 1 July 2025.**

Motorola – XTS/XTL radios

Kenwood – TK-5910 series mobile radios

EF Johnson – 51/53 series portable and mobile radios

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