



# APX new feature brief: **SR2024.1**- baseline release

Updated: July 2024

The SR2024.1 Baseline Release is the major software release and will be the standard firmware shipped from the factory for a 1 year duration. This baseline release includes all of the features included in releases [2023.2](#) and [2023.3](#).

Baseline Releases are intended for customers wishing to standardize on one version of firmware per year.

Options listed in the special configurations line under each feature must be added to the initial radio order, or added later in the field via Flashport.

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To learn more about the features within this release, [visit our SR2024.1 subscriber release training course](#).

# A - APX Standard Portable and Mobiles

SUBSCRIBER APX R33.02.00

APX Portable Platforms			
APX 8000 APX 8000XE APX 8000H APX 8000HXE	APX 7000 APX 7000L APX 7000XE APX 6000 APX 6000XE APX 6000Li	APX N50 APX 4000 (1&2 knob) APX 4000H APX 3000	APX N30 APX 2000 APX 1000 APX 900 VX-P949 SRX 2200

APX Mobile Platforms			
APX 8500 APX 8500HP	APX 7500 APX 6500 APX 6500Li	APX 4500 APX 4500Li APX 2500 APX 1500	TXM 2000 VHF TXM 3000 v 2.4

**New APX firmware version:** R33.02.00

**Previous APX firmware version:** R32.03.00

**APX VR Platforms:** DVR-LX/DVR/VRX1000

**New Version:** R1.90

**Previous Version:** R1.85

Companion Futurecom Repeater Configuration software, FRC 1.45

A.1

## Important Notes

Abstract: N/A

A.2

## New/Replacement Products

Abstract: N/A



## New Features

### Abstract: Digital Tone Signaling Encode/Decode Balancing

- **System Platforms Affected:** APX Standard BN models
- **Special Configurations:** Require QA09000- ADD: DIGITAL TONE SIGNALING
- **Description:** Extends the legacy feature (P25 Astro Alerting/P25 Tone Signaling) by allowing all 100 tones in the tone signaling list to be configured for decode  
Note: There will be no change to the OMAP radios and they will continue to be able to decode only the first 10 tones in the tone signaling list.

### Abstract: Voice Announcement for Channel Fallback

- **System Platforms Affected:** APX Standard radios and APX N30/N50
- **Special Configurations:** Customer who uses a radio as both a DVRS PSU and a Trunking subscriber
- **Description:** Enhancement of Channel fallback functionality to include Voice Announcements. Separate voice announcement audio may be selected to play for toggling on and off of the feature. To use Text-to-Speech voice announcements instead of audio files, the Voice Control option must be available on APX N50, and N30 radios.  
Reference Channel fallback: Seamless portable radio user operation and automatic switching from a DVRS mode to a Trunking or SmartConnect mode (LTE or WiFi) when users leave the coverage area of the DVRS.

### Abstract: MS-OTAR-ADP-Keyloading

- **System Platforms Affected:** APX Standard, APX N30/N50
- **Special Configurations:**  
OTAR and MSOTAR for HW ADP Key Loading from Secure Profile (Q498/G298 & QA07680/GA01620 )  
OTAR for HW ADP Key Loading from Secure Wide (Q498/G298)  
OTAR and ADP for SW ADP Key Loading from Secure Wide (Q498/G298 & Q667/G193)  
New PCI MACE ADP Key Loading Capable is present.
- **Description:** This feature allows HW & SW ADP Keyloading from Secure Wide Encryption Key List and HW ADP Key Loading from Secure Profile Encryption Key List.

### Abstract: Channel Search from Keypad Mic

- **System Platforms Affected:** APX Mobiles with Keypad Mic (HMN4079)
- **Special Configurations:** n/a
- **Description:** Allow assignment of the "Channel Search" action on the "Data Button" of the HMN4079 Keypad Mic.  
The 'Green tick' button on the HMN4079 Keypad Mic would activate the "Srch" action when in the Channel Search submenu on the radio.



### **Abstract: Inclusive Language Refresh - Man Down text changing to Fall Alert**

- **System Platforms Affected:** All Radios
- **Special Configurations:** n/a
- **Description:** In support of MSI's inclusivity, "Man Down" text is being removed from the Radio user interface, programming software and replaced with "Fall Alert"

### **Abstract: Decode Key ID Multikey- parity**

- **System Platforms Affected:** Adding support on APX N30/N50
- **Special Configurations:** Requires H869: ENH: MULTIKEY
- **Description:** This parity feature is to decode the secure key id over the trunking system when it is received in the radio.



# B - APX NEXT Series Portables

SUBSCRIBER APX NEXT R06.02.00

## APX NEXT Portable Platforms

APX NEXT  
APX NEXTi  
APX NEXT XE  
APX NEXT XN

**New APX firmware version:** R06.02.00  
**Previous APX firmware version:** R05.05.00

### B.1

## Important Notes

Abstract: N/A

### B.2

## New/Replacement Products

Abstract: N/A

### B.3

## New Features

### Abstract: Digital Tone Signaling Encode/Decode Balancing

- **System Platforms Affected:** APX NEXT radios
- **Special Configurations:** Require QA09000- ADD: DIGITAL TONE SIGNALING
- **Description:** Extends the legacy feature (P25 Astro Alerting/P25 Tone Signaling) by allowing all 100 tones in the tone signaling list to be configured for decode  
**Note:** There will be no change to the OMAP radios and they will continue to be able to decode only the first 10 tones in the tone signaling list.



### **Abstract: Voice Announcement for Channel Fallback**

- **System Platforms Affected:** APX NEXT radios
- **Special Configurations:** Customer who uses a radio as both a DVRS PSU and a Trunking subscriber  
Require QA09028 - ViQi Voice Control or QA08715/QA08715 - Basic Voice Control (for Text-to-Speech only)
- **Description:** Enhancement of Channel fallback functionality to include Voice Announcements. Separate voice announcement audio may be selected to play for toggling on and off of the feature. To use Text-to-Speech voice announcements instead of audio files, the Voice Control option must be available on APX Next radios.  
Reference Channel fallback: Seamless portable radio user operation and automatic switching from a DVRS mode to a Trunking or SmartConnect mode (LTE or WiFi) when users leave the coverage area of the DVRS.

### **Abstract: MS-OTAR-ADP-Keyloading**

- **System Platforms Affected:** APX NEXT
- **Special Configurations:**  
OTAR and MS-OTAR for HW ADP Key Loading from Secure Profile (Q498/G298 & QA07680/GA01620)  
OTAR for HW ADP Key Loading from Secure Wide (Q498/G298)  
OTAR and ADP for SW ADP Key Loading from Secure Wide (Q498/G298 & Q667/G193)  
New PCI MACE ADP Key Loading Capable is present.
- **Description:** This feature allows HW & SW ADP Keyloading from Secure Wide Encryption Key List and HW ADP Key Loading from Secure Profile Encryption Key List.

### **Abstract: LTE Configurability**

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** N/A
- **Description:** This feature allows you to turn LTE On / Off using configuration tools.

### **Abstract: Inclusive Language Refresh - Man Down text changing to Fall Alert**

- **System Platforms Affected:** All Radios
- **Special Configurations:**
- **Description:** In support of MSI's inclusivity, "Man Down" text is being removed from the Radio user interface, programming software and replaced with "Fall Alert" text.



### **Abstract: Decode Key ID Multikey- parity**

- **System Platforms Affected:** Adding support on APX NEXT
- **Special Configurations:** Requires H869: ENH: MULTIKEY
- **Description:** This parity feature is to decode the secure key id over the trunking system when it is received in the radio.

### **Abstract: Use ViQi Virtual Partner for location query and unit mgmt when Command Central Auto-Login is enabled (US Only)**

- **System Platforms Affected:** APX NEXT family and APX N70 (US Only)
- **Special Configurations:**  
QA09028: VIQI VC RADIO OPERATION  
Subscription to support ViQi Virtual Partner
- **Description:** Enabling CommandCentral Auto-Login (DBA device certificate based login) required the CPS flag to disable the ability to enable ViQi Virtual Partner as DBA is not considered CJIS compliant. Now the ViQi VP has introduced independently enabled functions such as unit management, status query and location query which do not require CJIS compliance, customers can now use the new ViQi VP query features with CommandCentral Auto-Login.

### **Abstract: Support WPA3-SAE**

- **System Platforms Affected:** APX N70
- **Special Configurations:** Only WiFi Connections
- **Description:** Support new configuration for WPA3-Personal (aka WPA3-SAE). When configured for WPA3-SAE, fallback to WPA2 is disabled. When configured for WPA2, automatic promotion to WPA3-SAE occurs if AP is supporting WPA3.

### **Abstract: Device Support of RSM Update via Flashport (USB) for WM800**

- **System Platforms Affected:** APX NEXT and APX NEXT XE with WM800 RSM
- **Special Configurations:** Requires QA00583: Bluetooth
- **Description:** Support of WM800 in CPS/RM and RC.

### **Abstract: Configurable minimum Volume for WM800**

- **System Platforms Affected:** APX NEXT and APX NEXT XE with WM800 RSM
- **Special Configurations:** Requires QA00583: Bluetooth
- **Description:** WM800 able to reach a 'near zero' volume level when paired and connected to radio. User is able to configure the min/max volume level of WM800 (paired and connected to radio) in radio codeplug through RC/CPS.

### **Abstract: COTS Accessory support via Hands Free Profile (HFP)**

- **System Platforms Affected:** APX NEXT and APX NEXT XE
- **Special Configurations:** Requires QA00583: Bluetooth
- Standard or Standard NFC Bluetooth Pairing Type needed
- **Description:** Bluetooth HFP (Hands Free Profile) support has been added to APX NEXT and this profile is also used by more modern COTS accessories for two-way communication over bluetooth (e.g. phone calls)  
Note: The user must use volume control on the COTS accessory to adjust the volume



# C - APX N70 Series Portables

SUBSCRIBER APX N70 R03.04.00

## APX N70 Portable Platforms

APX N70

**New APX firmware version:** R03.04.00

**Previous APX firmware version:** R02.02.00

C.1

## Important Notes

N/A

C.2

## New/Replacement Products

### Abstract: APX N70 UHF R1/R2 Model

- **System Platforms Affected:** All
- **Special Configurations:** N/A
- **Description:** The APX N70 is a new portable platform initiative designed to bring the APX portable high tier single band Smart devices into the next generation. The APX N70 UHF R1/R2 is a Band Split Variant in the form factors of APX N70 7/800 MHz model that was launched in late 2022. The entire UHF range (380 - 520 MHz) frequencies will be offered in a single device. The device will be certified to Div I HazLoc standard (TIA 4950) and will be launched at the same time.

C.3

## New Features

### Abstract: Digital Tone Signaling Encode/Decode Balancing

- **System Platforms Affected:** APX N70
- **Special Configurations:** Require QA09000- ADD: DIGITAL TONE SIGNALING
- **Description:** Extends the legacy feature (P25 Astro Alerting/P25 Tone Signaling) by allowing all 100 tones in the tone signaling list to be configured for decode  
Note: There will be no change to the OMAP radios and they will continue to be able to decode only the first 10 tones in the tone signaling list.





### **Abstract: Voice Announcement for Channel Fallback**

- **System Platforms Affected:** APX N70 radios
- **Special Configurations:** Customer who uses a radio as both a DVRS PSU and a Trunking subscriber  
Require QA09028 - ViQi Voice Control or QA08715/QA08715 - Basic Voice Control (for Text-to-Speech only)
- **Description:** Enhancement of Channel fallback functionality to include Voice Announcements. Separate voice announcement audio may be selected to play for toggling on and off of the feature. To use Text-to-Speech voice announcements instead of audio files, the Voice Control option must be available on APX N70 radios.  
Reference Channel fallback: Seamless portable radio user operation and automatic switching from a DVRS mode to a Trunking or SmartConnect mode (LTE or WiFi) when users leave the coverage area of the DVRS.

### **Abstract: MS-OTAR-ADP-Keyloading**

- **System Platforms Affected:** APX N70
- **Special Configurations:**  
OTAR and MSOTAR for HW ADP Key Loading from Secure Profile (Q498/G298 & QA07680/GA01620 )  
OTAR for HW ADP Key Loading from Secure Wide (Q498/G298)  
OTAR and ADP for SW ADP Key Loading from Secure Wide (Q498/G298 & Q667/G193)  
New PCI MACE ADP Key Loading Capable is present.
- **Description:** This feature allows HW & SW ADP Keyloading from Secure Wide Encryption Key List and HW ADP Key Loading from Secure Profile Encryption Key List.

### **Abstract: LTE Configurability**

- **System Platforms Affected:** APX N70
- **Special Configurations:** Only applicable for devices purchased with QA08887: Enabled LTE
- **Description:** This feature allows you to turn LTE On / Off using configuration tools.

### **Abstract: Inclusive Language Refresh - Man Down text changing to Fall Alert**

- **System Platforms Affected:** All Radios
- **Special Configurations:**
- **Description:** In support of MSI's inclusivity, "Man Down" text is being removed from the Radio user interface, programming software and replaced with "Fall Alert" text.

### **Abstract: Decode Key ID Multikey- parity**

- **System Platforms Affected:** Adding support on APX N70
- **Special Configurations:** Requires H869: ENH: MULTIKEY
- **Description:** This parity feature is to decode the secure key id over the trunking system when it is received in the radio.



## Abstract: Use VP for location query and unit mgmt when Auto-Login is enabled (US Only)

- **System Platforms Affected:** APX N70 (US Only)
- **Special Configurations:**  
QA09028: VIQI VC RADIO OPERATION  
Subscription to support ViQi Virtual Partner
- **Description:** Enabling CommandCentral Auto-Login (DBA device certificate based login) required the CPS flag to disable the ability to enable ViQi Virtual Partner as DBA is not considered CJIS compliant. Now the ViQi VP has introduced independently enabled functions such as unit management, status query and location query which do not require CJIS compliance, customers can now use the new ViQi VP query features with CommandCentral Auto-Login

## Abstract: Support WPA3-SAE

- **System Platforms Affected:** APX N70
- **Special Configurations:** Only WiFi Connections
- **Description:** Support new configuration for WPA3-Personal (aka WPA3-SAE). When configured for WPA3-SAE, fallback to WPA2 is disabled. When configured for WPA2, automatic promotion to WPA3-SAE occurs if AP is supporting WPA3.



# D - Device Management

**CPS New Version:** R33.00.00

**CPS Previous Version:** R32.00.00

**RadioCentral New Version:** 2.148.188

**RadioCentral Previous Version:** 2.144.167

## D.1

### Important Notes

#### **Abstract: ASTRO RM-CPS Operating Systems Support**

- **System Platforms Affected:** ALL
- **Special Configurations:** N/A
- **Description:** Starting with version R29.00.00, APX RM/CPS is only supported on 64 bit versions of the following operating systems:
  - Windows 11
  - Windows 10 (from 1607 version)
  - Windows Server 2022
  - SQL server 2022

#### **Note:**

Please see the APX\_CPS\_Readme file and the CPS HELP for additional information.

