



Rensselaer County Bureau of Public Safety 800 MHz Radio User Training

APX 4500 Mobile Radio
APX 6500 Mobile Radio
02 Control Head



Before You Begin...



View the Operations Training Presentation first, it covers:

- Overview of Rensselaer County's Radio System
- Operations Guidelines
- Policies and Procedures
- Interoperability
- Fleet Map
- Channel Use



APX 4500: Introduction



Radio Functions:

- Radio and Microphone Overview
- Radio Operation
- Audio Alerts: Tones & Bonks
- Emergency Operation
- Scan, Nuisance Delete
- Contact for System Questions



APX 4500: Radio and Microphone Overview



Radio – Control Head



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APX 4500: Radio and Microphone Overview



Microphone

PTT Button



APX 4500: Radio Power Up



To Power up the Radio

- Press and briefly hold the Power Button
- Your Radio will always **power up to Zone 1 and Channel 1, as well as the Scan Mode (Scan On/Off) you were tuned to when your radio was powered off**
- Display screen will read "APX 4500" or "APX 6500" and radio will give a short beep upon power up

Power Button



APX 4500: Menu Functions – Zone Select



Programmable Button Functions

The following Programmable Button functions are available:

- Zone Select
- Scan On / Off
- Nuisance Delete



Zone Select

APX 4500: Menu Functions – Zone Select



Navigating Through Zones and Channels

- Press the Zone button
- Use the Up and Down buttons to scroll through zones
- Press the Zone button again to select the zone being displayed
- Use the Up and Down buttons to select the desired channel



Programmable "Zone" Button

APX 4500: Menu Functions – Zone Select



Navigating Through Zones and Channels

- Press the Zone button
- Use the Up and Down buttons to scroll through zones
- Press the Zone button again to select the zone being displayed
- Use the Up and Down buttons to select the desired channel

Up and Down Buttons



APX 4500: Menu Functions – Zone Select



Navigating Through Zones and Channels

- Press the Zone button
- Use the Up and Down buttons to scroll through zones
- Press the Set button to select the zone being displayed
- Use the Up and Down buttons to select the desired channel



Set Button

APX 4500: Menu Functions – Zone Select



Navigating Through Zones and Channels

- Press the Zone button
- Use the Up and Down buttons to scroll through zones
- Press the Zone button again to select the zone being displayed
- Use the Up and Down buttons to select the desired channel

Up and Down Buttons



APX 4500: Menu Functions - Scan



Programmable Button Functions

The following Programmable Button functions are available:

- Zone Select
- Scan On / Off
- Nuisance Delete



Scan On / Off

APX 4500: Menu Functions - Scan

Entering Scan Mode



- By pushing the Scan On/Off button, your radio will enter Scan Mode
- Look for the Scan Symbol in the radio display to ensure that Scan mode is On
- Turning the Scan Off allows you to **ONLY** monitor the Channel which is in the radio display. To resume scanning, press the Scan On/Off button

Note:

When your radio is powered OFF and then ON, it will remain in the mode that you left it (Scan On or Scan Off)



APX 4500: Menu Functions - Scan



APX 4500 mobile can Scan Channels

FIRE/EMS DISPATCH and ALERT are in the Scan List, along with your assigned TAC channel (Battalion/EMS-specific)

2 additional channels may be added at the Agency's discretion

Ground Channels **ARE NOT** scanned



APX 4500: Menu Functions – Nuisance Delete



Programmable Button Functions

The following Programmable Button functions are available:

- Zone Select
- Scan On / Off
- Nuisance Delete



Nuisance Delete

APX 4500: Menu Functions – Nuisance Delete



Nuisance Delete

- Temporarily removes channels from the scan list
- Press the “Nuis” button to remove a channel
- Channel returns to scan list when channel is changed or radio is powered off, then back on



Nuisance Delete

APX 4500: Transmit Operation



To Transmit

- Verify the channel you want to communicate with on the LCD Display
- Listen for ongoing traffic and ensure the channel is clear before pressing the Push-To-Talk (PTT) Switch
- Press the PTT Switch, wait for the Talk Permit Tone and speak
- If you receive an out of range tone, hold the PTT Switch to continue attempting access



APX 4500: Transmit Operation



To Transmit

- Verify the channel you want to communicate with on the LCD Display
- Listen for ongoing traffic and ensure the channel is clear before pressing the Push-To-Talk (PTT) Switch
- Press the PTT Switch, wait for the Talk Permit Tone and speak
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Speaker

APX 4500: Transmit Operation



To Transmit

- Verify the channel you want to communicate with on the LCD Display
- Listen for ongoing traffic and ensure the channel is clear before pressing the Push-To-Talk (PTT) Switch
- Press the PTT Switch, wait for the Talk Permit Tone and speak
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APX 4500: Transmit Operation



To Transmit

- Verify the channel you want to communicate with on the LCD Display
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APX 4500: Transmit Operation



Speaking into the Microphone

- Fully depress the PTT switch and wait for the Talk Permit Tone. ***If you talk before you hear the Talk Permit Tone, some of what you said will be lost***
- Release the PTT switch when done speaking. For best results, keep messages brief (a few seconds)



PTT Switch

APX 4500: Transmit Operation



For BEST Results

- Hold the microphone about 2 inches from your mouth and speak at a normal conversation tone
- Shouting distorts your voice and DOES NOT increase radio range
- Always face the microphone



Microphone

APX 4500: Receive Operation



To Receive a Call

- Ensure that the radio is selected to the proper channel
- When a call is received, it will be heard through the control head speaker or external speaker
- When in Scan, select the channel that has the highest priority
- When turning the Scan OFF, this **ONLY** allows you to monitor the channel which is in the radio display



APX 4500: Audio Alerts



Audio Alerts

- Talk Permit Tone
- Unprogrammed Channel
- System Busy
- Failsoft
- Out-of-Range



APX 4500: Audio Alerts



Talk Permit Tone

REMEMBER! This is a Repeater-type system

If you talk before you hear the Talk Permit Tone, some of what you said will be lost

If you hear a tone when pressing the PTT, one of several things may be happening:

- No Signal
- All Channels are Busy
- Your Radio or Antenna is Damaged



APX 4500: Audio Alerts



Unprogrammed Channel

Heard when a channel position is selected that is not programmed with a channel



APX 4500: Audio Alerts



System Busy



If you receive a System Busy

- Release the PTT Switch
- Wait for the Talk Permit Tone
- Push the PTT and transmit your message

Notes on System Busy

- Delay is often very short (a few seconds)
- Remember to release the PTT and wait for the Talk Permit Tone
- By repeatedly pushing the PTT, you are repeatedly placed “in line” for transmitting -- which makes your wait **longer!**



APX 4500: Audio Alerts



Failsoft Mode

- Failure of Trunking System
- Radio automatically goes to Failsoft
- Radio will beep every 10 seconds and display "Failsoft" on screen



Notes on Failsoft Mode

- Many channels will be put onto one frequency, so you may hear departments you normally would not hear
- **EMERGENCY TRAFFIC ONLY!**
Resources are limited, so restrict transmissions



APX 4500: Audio Alerts



Out of Range Tone



- If your radio is receiving the Out-of-Range Tone, your radio is NOT seen by the system
- You cannot Talk or Receive messages on trunked channels
- System Channels and the **Emergency Button** *will not work* when you are Out-of-Range
- Your operations may need to utilize Ground Channels for communication



APX 4500: **EMERGENCY** Operation



Emergency Button

The **Emergency** Button:

Used in situations that demand immediate communications

Think "**LIFE AND DEATH**"



APX 4500: **EMERGENCY** Operation

Declaring an **Emergency** – Trunked Operation



- **Instantaneous** Transmit
- **“HOT MIC”**: When activated, your microphone will automatically open for 10 Seconds. LCD screen will feature **Emergency** operation indicators in orange
- **Emergency Button** must be depressed to activate an emergency
- Identify yourself and state your **emergency**
- You will be immediately heard at the Dispatch Center



APX 4500: **EMERGENCY** Operation Declaring an **Emergency**



Ground Channel

- **Instantaneous** Transmit
- Emergency Alert will be broadcast to all radios within range, and selected on the same channel
- “**HOT MIC**”: When activated, your microphone will automatically open for 10 Seconds. LCD screen will feature **Emergency** operation indicators in orange
- **Emergency Button** must be depressed to activate an emergency
- Identify yourself and state your **emergency**
- You will **NOT** be heard at the Dispatch



APX 4500: **EMERGENCY** Operation



Clearing the **Emergency**

- Once you have transmitted your emergency you need to clear your radio from the **Emergency Mode**
- **First**, speak with dispatch to verify that Emergency can be cleared
- Then do either of the following:
 - Press and hold the Emergency button for at least 3 seconds
 - turn the radio off and back on again



Reporting a Problem



For System Questions

Contact:

Paul Glasser, Communications Coordinator

(518) 266 - 3320

pglasser@rensco.com



Video Training



Please complete the short survey at completion of your review of relevant videos



Acknowledgement of Training

Please complete the following information in acknowledgement of viewing applicable training videos.

* Required

First Name *

Last Name *
Department or Company *
Please type full department or company name, not number.
Training Videos reviewed: *
Please check all that apply.

- XTL Series
- XTS Series
- APX Series
- Astro Spectra Series
- MCS Series
- MTS Series
- Other:

I certify that I have viewed and understand the information provided in the training videos selected above. I understand that if I have any additional questions regarding the training materials, I should contact my shift supervisor. *

By checking this box, I acknowledge and accept the above statement.

Please answer the following questions as they apply to the video training course: *
Lowest - Highest (1 - 5)

	1	2	3	4	5
How well did the course content meet your needs?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much better will you be able to operate your radio, as related to your job duties, now that you have taken this course?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>