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

- Power Button
- LCD Display
- Up and Down Buttons
- Speaker
- LED Indicators
- Microphone Port
- Programmable Menu Select Buttons
- Home Button
- Dimmer Knob
- Emergency Button
- Multi-function Knob
APX 4500: Radio and Microphone Overview

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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

APX 4500: Menu Functions – Zone Select

Programmable Button Functions

The following Programmable Button functions are available:

- Zone Select
- Scan On / Off
- Nuisance Delete
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
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
APX 4500: Menu Functions - Scan

Programmable Button Functions
The following Programmable Button functions are available:

- Zone Select
- Scan On / Off
- Nuisance Delete

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
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](image)

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

![LCD Display](image)
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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)
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

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
**Audio Alerts**

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

**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
Unprogrammed Channel

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

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

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**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

The **Emergency Button**:

Used in situations that demand immediate communications

Think “LIFE AND DEATH”

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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 Center

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