

The background features a large, semi-transparent logo for the University of San Diego Fire Science Institute. The logo is circular with a gold border and contains the text 'UNIVERSITY of SAN DIEGO' and 'FIRE SCIENCE INSTITUTE' around a central shield. The year '1889' is at the bottom. A small speaker icon is overlaid on the shield.

**MOTOROLA  
APX 8000XE  
Portable Radio**

**BASIC  
OPERATION**

# **OBJECTIVES**

- **1. FEATURES AND CAPABILITIES**
- **2. KNOBS, BUTTONS, AND SWITCHES**
- **3. SCREEN ICONS**
- **4. MENU OPTIONS**
- **5. GENERAL RADIO OPERATION**
- **6. EMERGENCY OPERATION**
- **7. REMOTE SPEAKER MICS**
- **8. BATTERIES AND BELT CLIP**
- **9. CLEANING AND DISINFECTING**

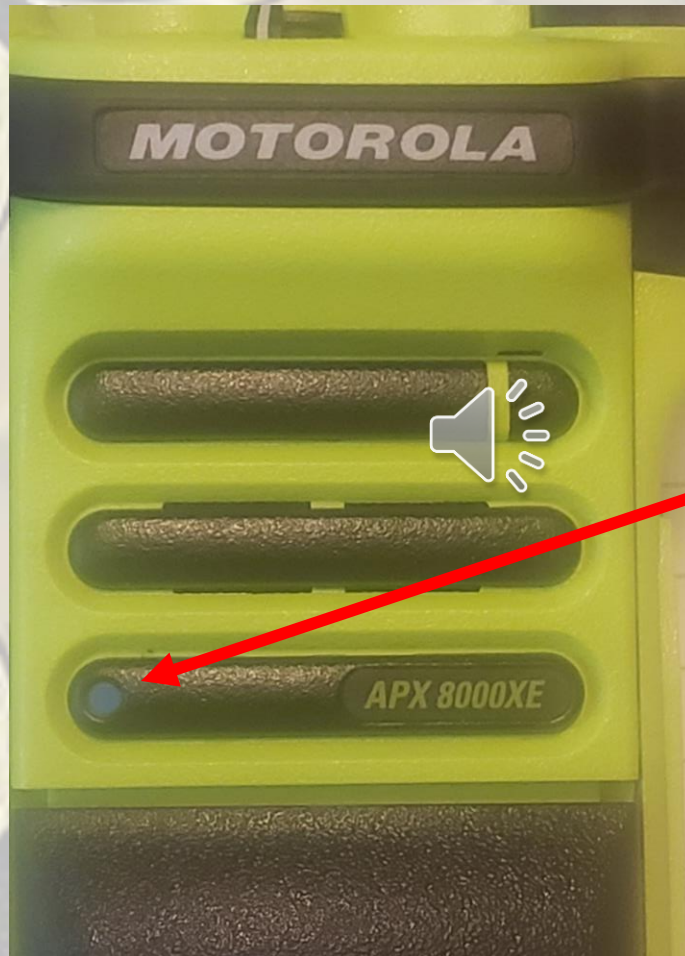


# **FEATURES AND CAPABILITIES**

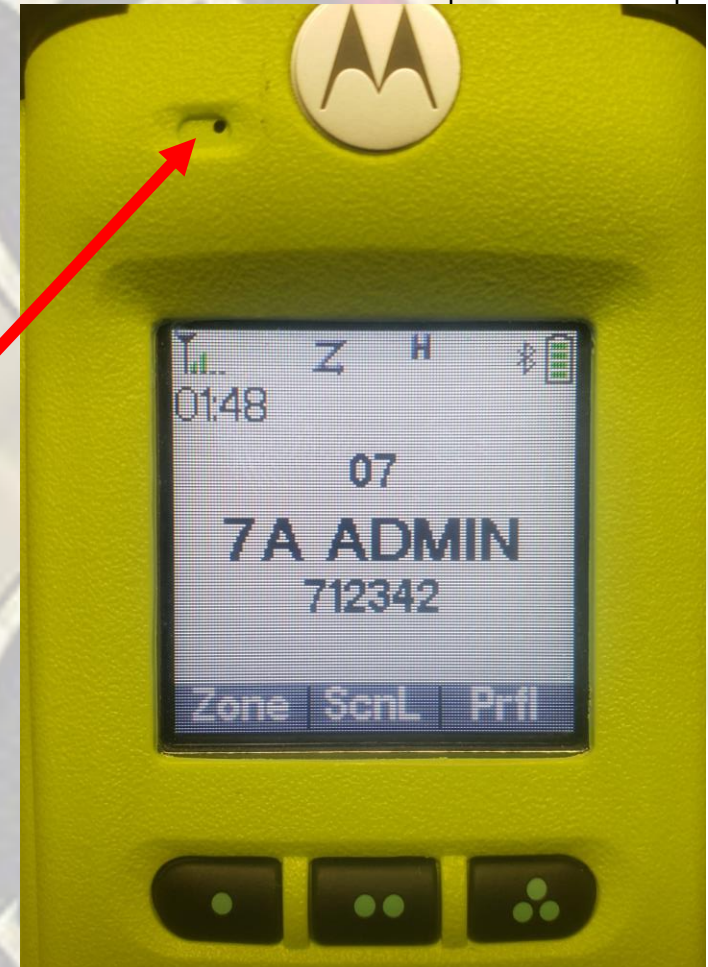
- **DUAL BAND RADIO; 700/800 AND VHF**
- **RUGGEDIZED, IP68 SUBMERSIBLE; AND ABLE TO WITHSTAND HIGH/LOW TEMPS**
- **UP TO 10 HOURS WITH 3400 mAh LITHIUM ION BATTERY**
- **3000 CHANNEL CAPACITY**
- **NOISE CANCELING**
- **3X DYNAMIC / COMMAND ZONES**
- **ON BOARD BLUETOOTH / WIFI**
- **BUILT IN GPS**

# FEATURES AND CAPABILITIES; NOISE CANCELLING

- APX8000 HAS 2 MICROPHONES.
- WILL SWITCH BETWEEN THE 2 AND USE THE ONE WITH LESS BACKGROUND NOISE.



**MIC**



# KNOBBS BUTTONS AND SWITCHES



**LIGHT / DIMMER**

**PTT: PUSH TO TALK**

**SINGLE DOT BUTTON: CHANNEL  
ANNOUNCE**

**2 DOT BUTTON: RADIO INFO /  
BUTTON ASSIGNMENT**

# **KNOBS BUTTONS AND SWITCHES**



**EMER BUTTON**

**LED**

**SCAN ON / OFF SELECTOR**

**16 POSITION CHANNEL KNOB**

**ABC SELECTOR: (NOT PROGRAMMED)**

**ON/OFF/ VOLUME KNOB**

# KNOBBS BUTTONS AND SWITCHES

- ✧ **Solid red** – Radio is transmitting.
- ✧ **Blinking red** – Radio is transmitting at low battery condition.
- ✧ **Double blinking red** – Radio is in MAYDAY/ Emergency Mode.
- ✧ **Rapidly blinking red** – Radio has failed the self test upon powering up or encountered a fatal error.
- ✧ **Solid yellow (Conventional Only)** – Channel is busy.
- ✧ **Blinking yellow** – Radio is receiving a secured transmission.
- ✧ **Solid green** – Radio is powering up, or is on a non-priority channel while in the Scan List Programming mode.



# KNOBBS BUTTONS AND SWITCHES

**MICROPHONE**



**MENU SELECTION BUTTONS**



**HOME BUTTON**



**DATA FEATURE BUTTON**

**4 WAY NAVIGATION BUTTON**



**KEYPAD**



# SCREEN ICONS



# SCREEN ICONS



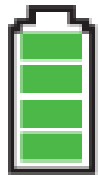
## Receiving

Radio is receiving a call or data.



## Transmitting

Radio is transmitting a call or data.



## Battery

For IMPRES battery operation only – the icon shown indicates the charge remaining in the battery.  
For all battery operation – the icon blinks when the battery is low.



# SCREEN ICONS

**H** or **L**

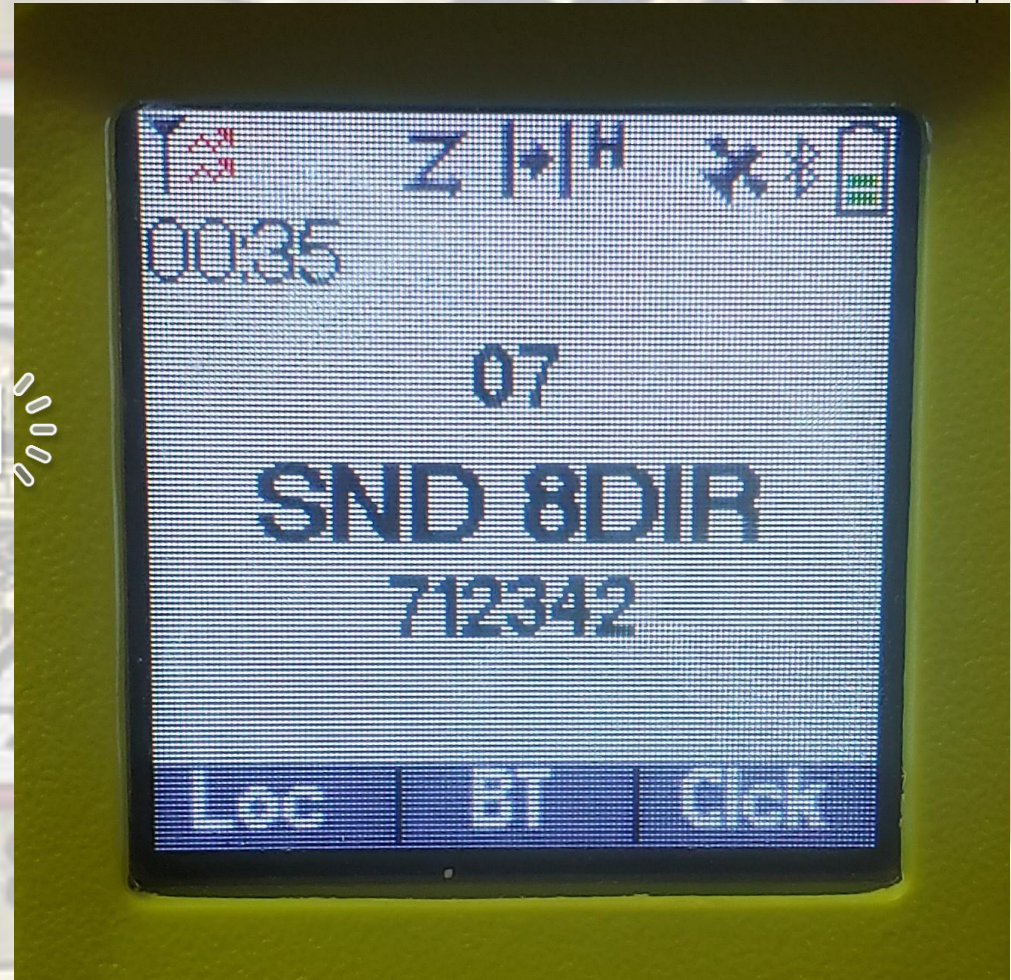
## Power Level

- L = Radio is set at Low power.
- H = Radio is set at High power.

**Z**

## Priority Scan

Radio is actively scanning a scan list.

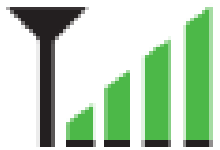


# SCREEN ICONS



## Direct

- On = Radio is currently configured for direct radio-to-radio communication (during conventional operation only).
- Off = Radio is connected with other radios through a repeater.



## Received Signal Strength Indicator (RSSI)

The number of bars displayed represents the received signal strength for the current site, for trunking only. The more stripes in the icon, the stronger the signal.



## Location Signal

- On = Location feature is enabled, and location signal is available.
- Off = Location feature is disabled.
- Blinking = Location feature is enabled, but no location signal is available.

# SCREEN ICONS



## Bluetooth On

Bluetooth is on and ready for Bluetooth connection.



Top Display

## Bluetooth Connected

Bluetooth is currently connected to the external Bluetooth device.




## Wi-Fi

The radio Wi-Fi network is connected.  
The number of bars displayed represents the signal strength of the Wi-Fi signal.

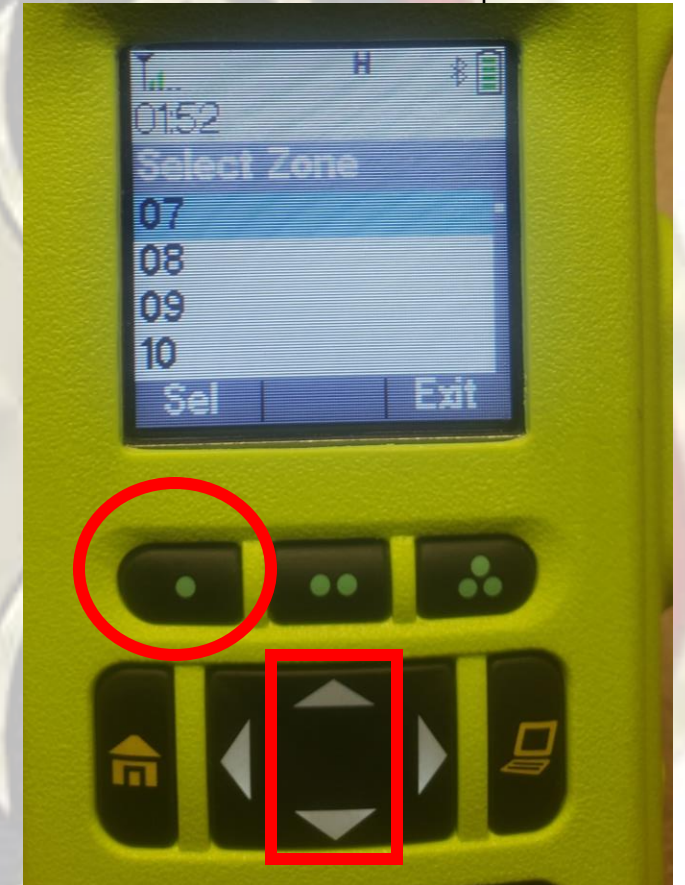
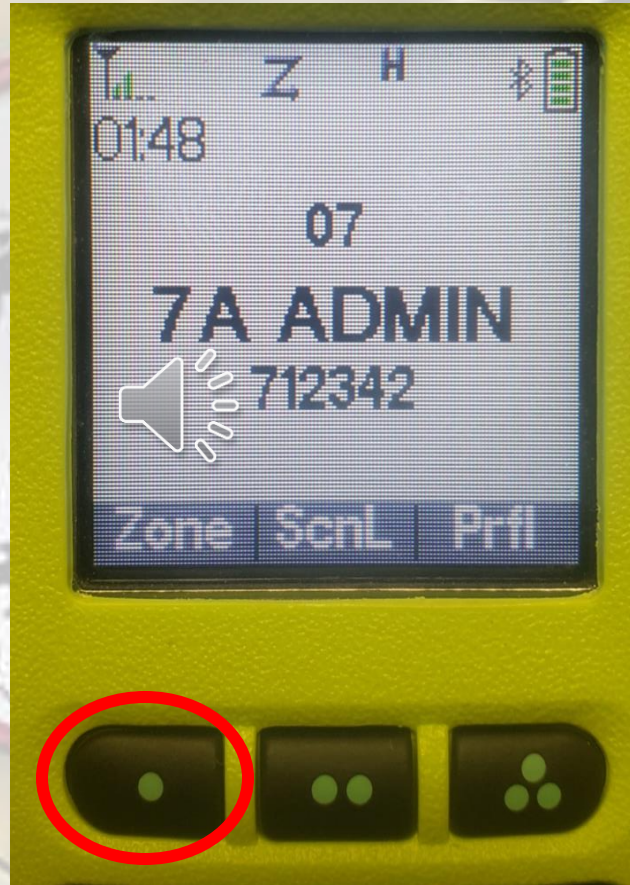


# MENU OPTIONS

- ZONE
- SCAN LIST
- PROFILE
- BLUE TOOTH
- CLOCK
- MUTE
- MEMORY PRESETS MS1, MS2, MS3
- **MPL** 
- **CHANNEL (VHF)**
- **LOCATION**

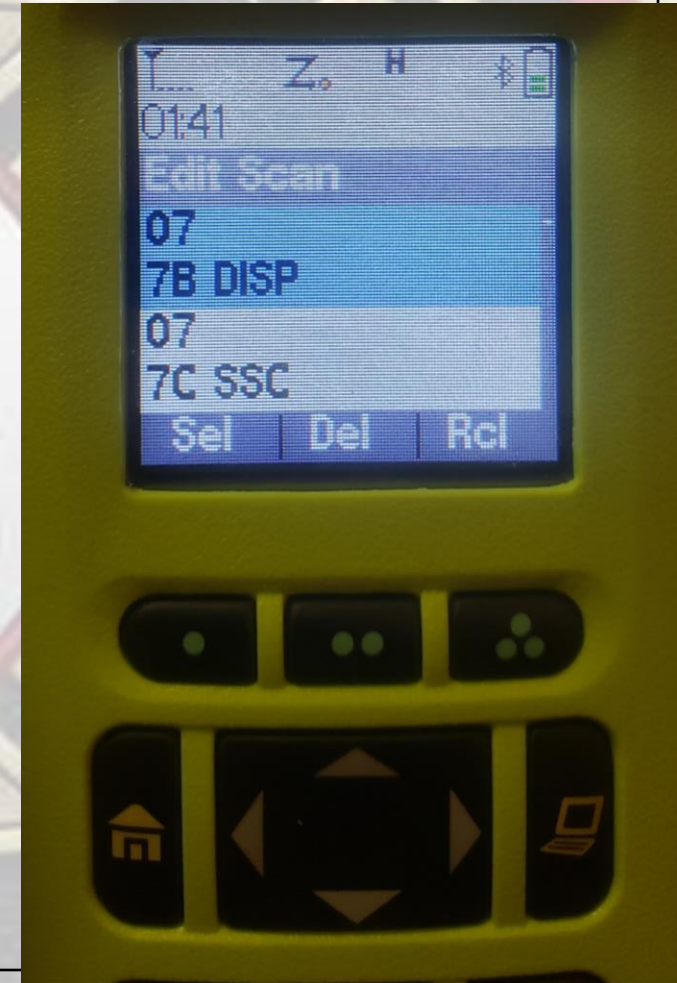
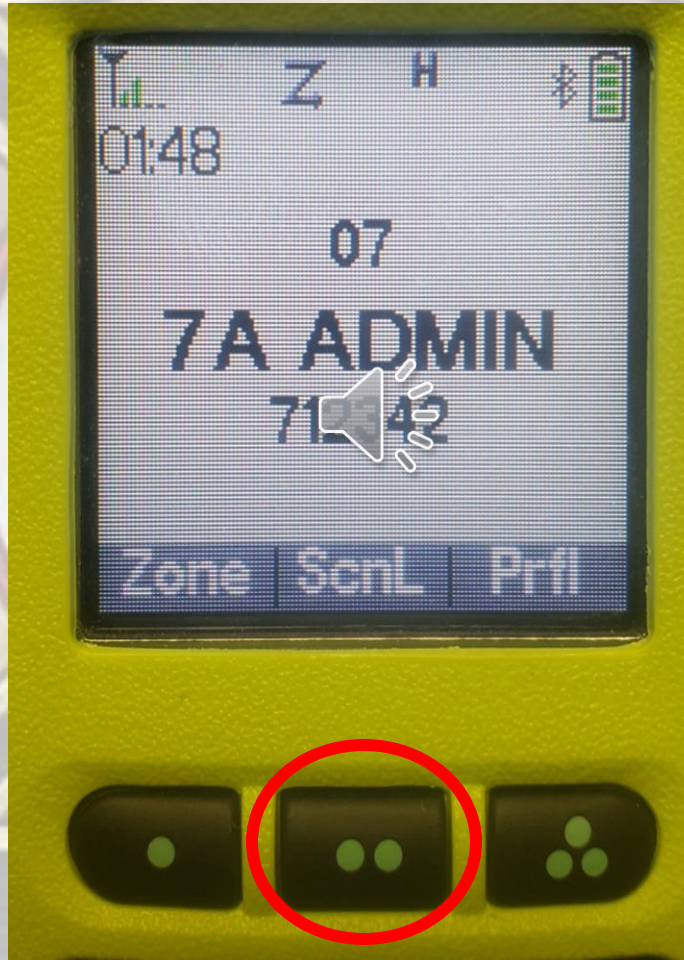
# GENERAL OPERATION: CHANGING ZONES

- PRESS THE HOME BUTTON TO BRING MENU TO DEFAULT SCREEN
- PRESS SOFT KEY UNDER "ZONE"
- USE UP/DOWN ARROWS ON 4 WAY NAV BUTTON OR ENTER ZONE NUMBER DIRECTLY
- PRESS SOFT TOUCH BUTTON UNDER SELECT



# GENERAL OPERATION: SCAN LIST

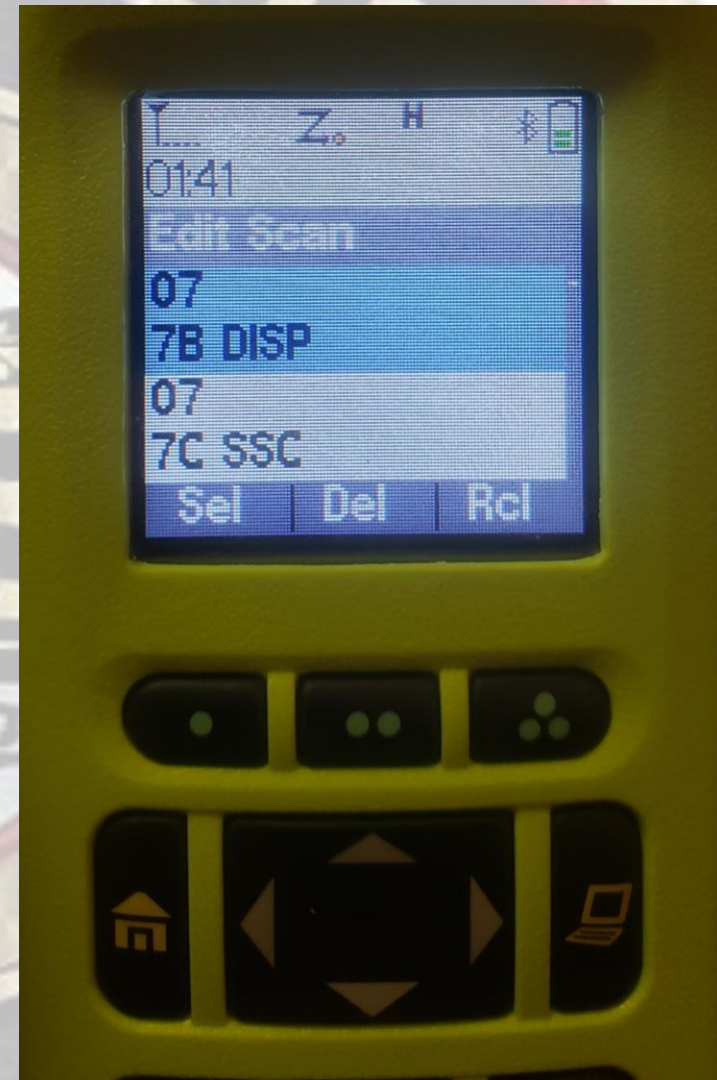
- PRESS SOFT TOUCH BUTTON UNDER SCAN LIST
- USE UP/DOWN ARROWS TO NAVIGATE THROUGH CHANNELS WITHIN ZONE
- USE LEFT/RIGHT ARROWS TO CHANGE ZONE





# GENERAL OPERATION: SCAN LIST

- PRESS BUTTON UNDER SELECT TO ADD HIGHLIGHTED CHANNEL AND DELETE TO REMOVE
- "Z" WILL APPEAR AT TOP MIDDLE OF SCREEN WHEN CHANNEL IS SELECTED
- PRESS RECALL MULTIPLE TIMES TO QUICKLY GO THROUGH SCAN LIST
- UP TO 16 CHANNELS CAN BE ADDED TO A SCAN LIST
- YOUR PRIORITY CHANNEL WHILE SCANNING WILL ALWAYS BE THE CHANNEL THE RADIO IS ON.



# GENERAL OPERATION: SCAN LIST

- **REMINDER THAT YOU CANNOT SCAN ACROSS CHANNEL TYPES.**
- EXAMPLE CANNOT SCAN AN RCS OR CONVENTIONAL (DIRECT) CHANNEL WHILE ON A SAN DIEGO CITY ZONE
- **SAN DIEGO CITY TRUNKED** ARE 7, 8, 9, 24 (TNG), 25 (SDM), SDPD, AND SD LIFE GUARDS
- **RCS TRUNKED** ARE ZONES 1-6, 10, AND 11 (ALL OTHER COUNTY FIRE AGENCIES)
- **CONVENTIONAL** ARE ANY 800 MHZ DIRECT OR ANY VHF CHANNEL

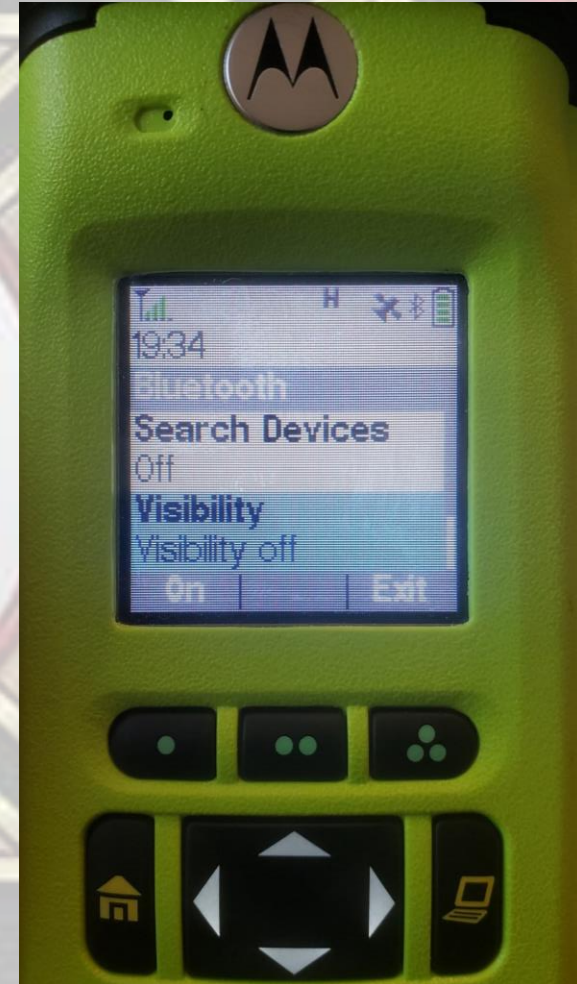
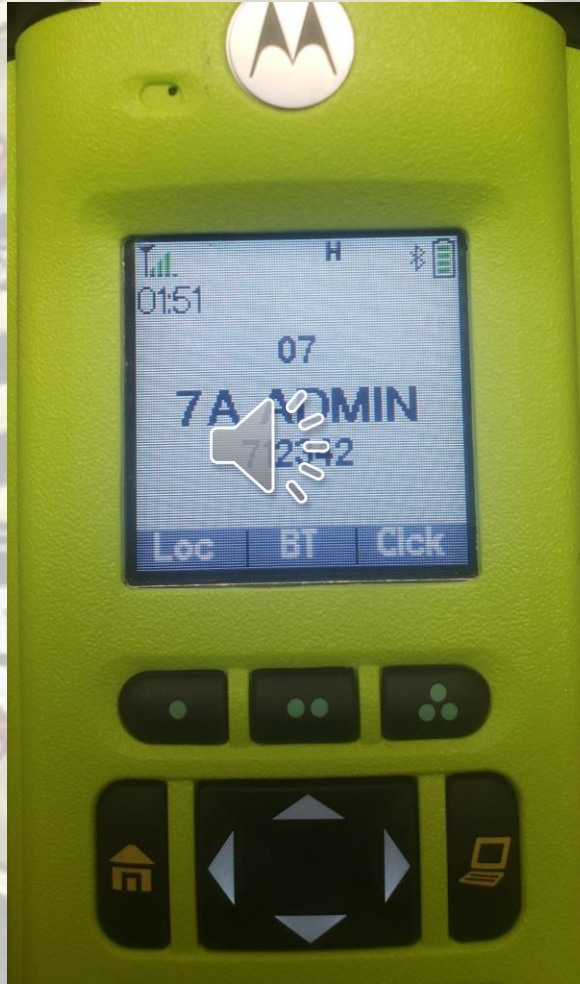
# GENERAL OPERATION AUDIO PROFILE

- PRESS PROFILE BUTTON TO SELECT AUDIO PROFILES
- THE ONLY SELECTION WILL BE NORMAL AND LOUD.
- THE RECCOMENDATION IS TO REMAIN ON NORMAL



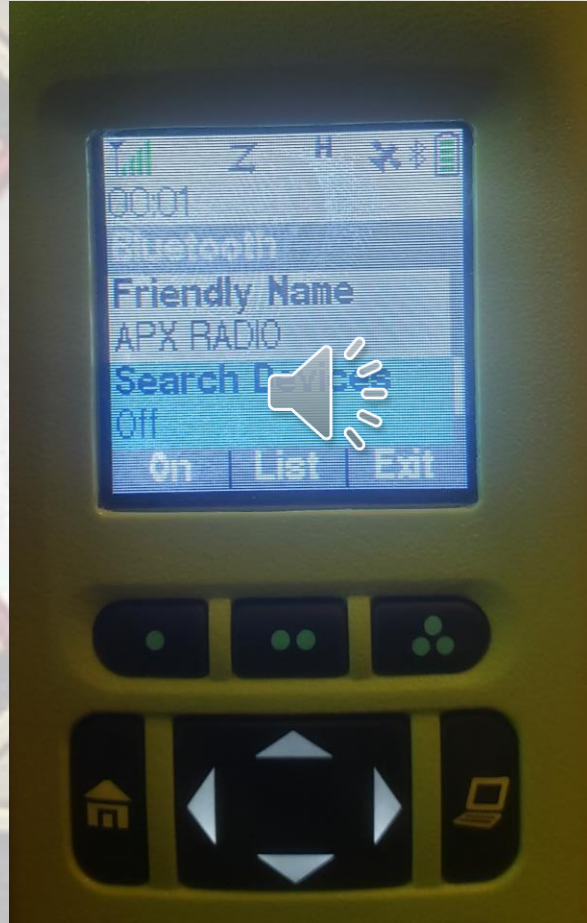
# GENERAL OPERATION BLUETOOTH

- FROM HOME MENU SCROLL ONCE TO THE RIGHT
- SELECT "BT"
- FROM HERE YOU CAN TURN BT ON, SEARCH FOR AND PAIR WITH DEVICES



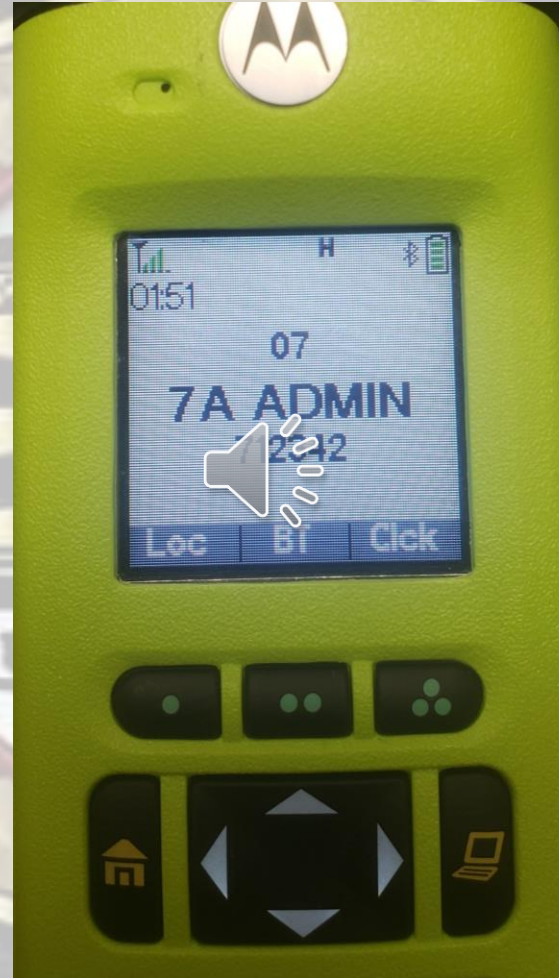
# GENERAL OPERATION BLUETOOTH

- ENSURE BLUETOOTH "STATUS" IS ON
- ENSURE DEVICE IS READY TO BE PAIRED
- SCROLL DOWN TO "SEARCH DEVICES" AND TURN ON
- THE DEVICE NAME (SCOTT) SHOULD APPEAR FOR SELECTION



# GENERAL OPERATION CLOCK

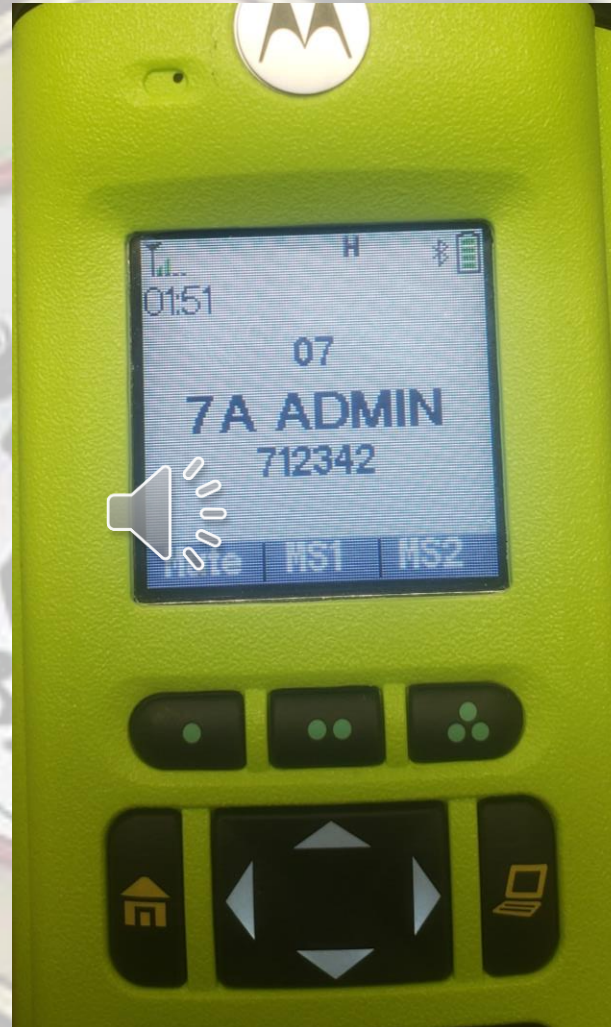
- FROM MENU, SELECT CLOCK
- SELECT EDIT, FROM HERE YOU CAN CHANGE TIME, 12/24 HR FORMAT, AND THE DATE



# GENERAL OPERATION

## MUTE

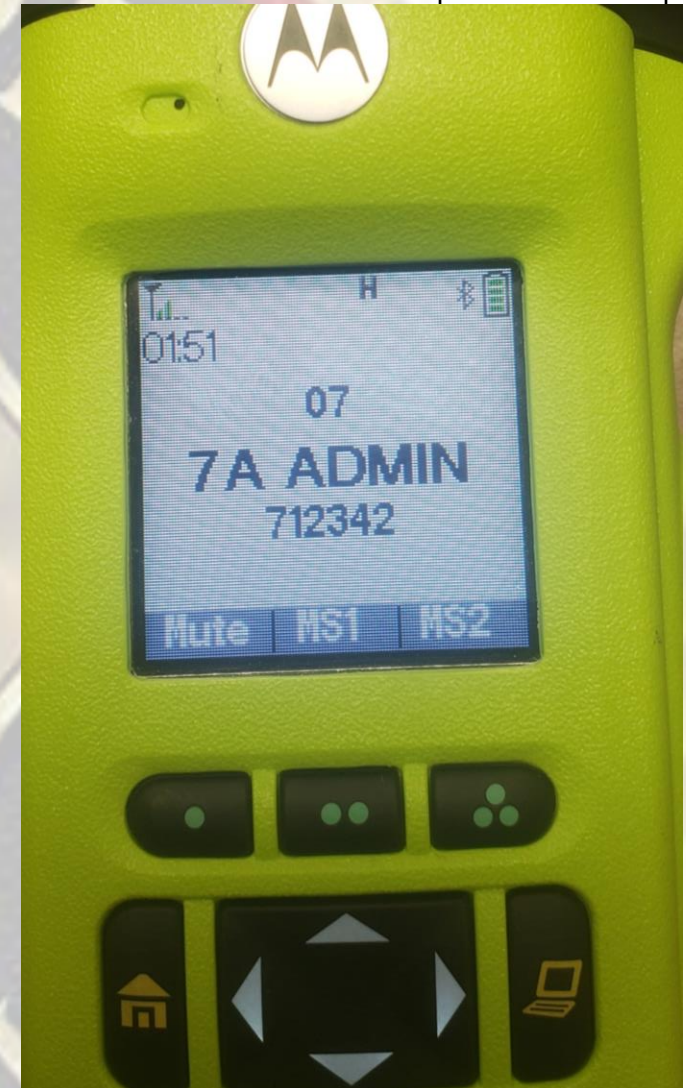
- SCROLL MENU TWICE TO THE RIGHT AND SELECT MUTE
- THIS TURNS OFF/ON THE TONES OF THE RADIO AS WELL AS CHANNEL ANNUNCIATION



# GENERAL OPERATION

## MS1, MS2, MS3

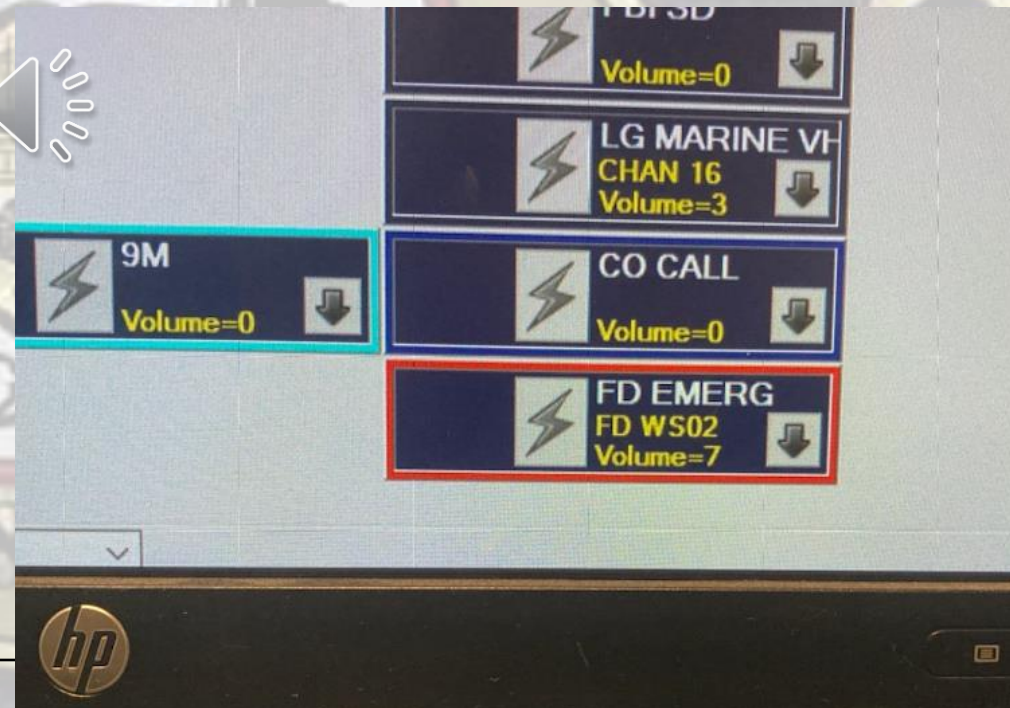
- PRESET MEMORY BUTTONS TO QUICKLY ACCESS CHANNELS.
- NAVIGATE TO THE DESIRED CHANNEL. "7E FOR EXAMPLE"
- SCROLL MENU TO MS1, PRESS FOR 3 SECONDS. 7E IS NOW SET AS A MEMORY CHANNEL.
- ANY CHANNEL IN RADIO CAN BE SELECTED, 7/600MHZ, VHF ETC.
- SIMILAR TO PRESETS ON AN AM/FM RADIO
- SIMILAR TO SCAN LIST, RECOMMEND CHECKING AT BEGINNING OF EACH SHIFT.
- **SAFETY NOTE: CHANNEL KNOB DISASSOCIATION**, IF MS1 BRINGS YOU TO "8A" AND CHANNEL KNOB WAS LAST ON "7E" WHEN KNOB IS TURNED CLOCKWISE IT WILL SWITCH TO "8F"





# EMERGENCY OPERATION

- WHEN DECLARING AN EMERGENCY ON AN INCIDENT
- PRESS THE ORANGE BUTTON ON TOP OF THE RADIO
- ONCE EMERGENCY IS TRANSMITTED ECDC WILL RECEIVE IT WITH YOUR UNIT AND POSITION (ie E14 FF4) THEY WILL THEN CONTACT THE IC TO ADVISE OF THE EMERGENCY NOTIFICATION
- TO RESET AN EMER SIMPLY PRESS ORANGE BUTTON AGAIN FOR 3-5 SECONDS



# EMERGENCY OPERATION

- IMPORTANT ALIAS DATABASE IS UPDATED AT BEGINNING OF EVERY GO AROUND SO METRO HAS CORRECT ID ON THEIR END
- EMER ACTIVATIONS IN OTHER ZONES WILL BE SENT TO THE RESPECTIVE DISPATCH AGENCY, ZONES 1&2 GO TO Heartland, 3&4 to North Comm, 5 to Escondido, 10&11 to San Diego (formally Monte Vista)
- **EMER ACTIVATIONS DON'T WORK WHEN RADIO IS ON A CONVENTIONAL CHANNEL**, FOR EXAMPLE "SND 8 DIR" OR ANY "VHF" CHANNEL. RADIO MUST BE ON A TRUNKED SD CITY OR RCS CHANNEL.
- TOP SCREEN WILL ILLUMINATE RED AND SPEAKER MIC FLASHLIGHT WILL CONTINUALLY FLASH DURING EMER.



# RADIO REPLACEMENTS



# REMOTE SPEAKER MIC

- NEW MOTOROLA XE500 SPEAKER MICS BEING ISSUED PER RADIO

**VOLUME TOGGLE**

**PTT "PUSH TO TALK"**

**CHANNEL ANNOUNCE BUTTON**



**FLASHLIGHT**

**MICROPHONE**

**SPEAKER**

# REMOTE SPEAKER MIC

- NEW MOTOROLA XE500 SPEAKER MICS BEING ISSUED PER RADIO
- CHANNEL SELECTOR KNOB NOT ON NEW COLLAR MIC.

**BELT CLIP AND D RING**



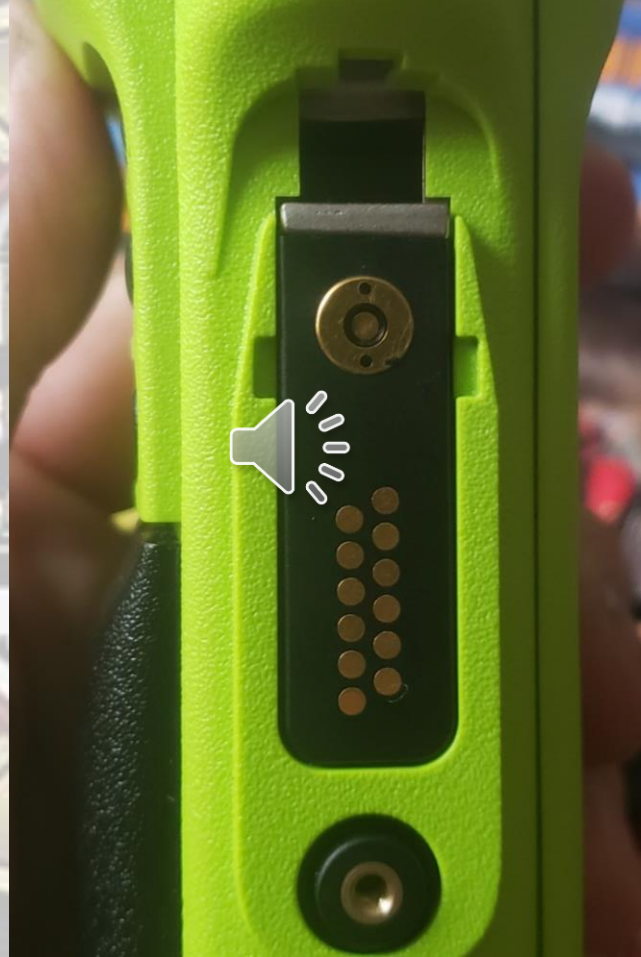
**EMER BUTTON**

**TRANSMIT LED**

**BLUETOOTH LED**

# REMOTE SPEAKER MIC

- **KEEP MIC CONNECTOR CLEAN**
- THESE BRASS CONNECTIONS GET WEATHERED AND GREEN OXIDATION WILL FORM
- CLEAN WITH PENCIL ERASER
- OR ISOPROPYL ALCOHOL



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# INSPECTING & CONNECTING Speaker Mic.



# Mic Connection / Battery Test

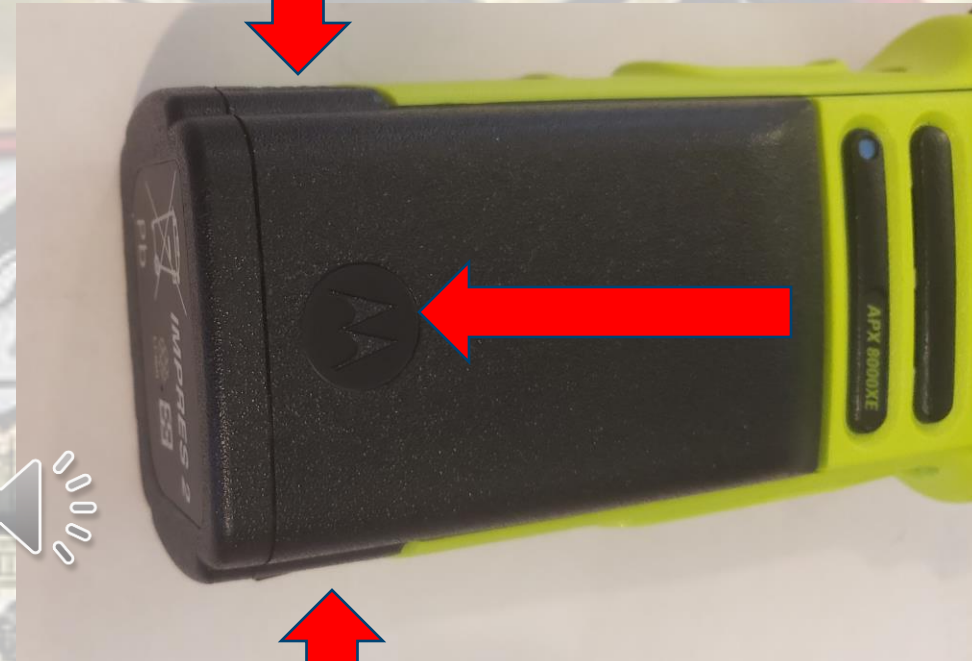


- 1<sup>st</sup> Day Back
- Tx For 1 Min on Batt Training Channel
-  Using a 2<sup>nd</sup> Radio, Ensure Collar Mic Transmits and Receives Audio
- Radio should Remain Transmitting and shouldn't give any indication of a low battery.



# BATTERIES AND BELT CLIPS

- 3400 mAh LITHIUM ION IMPRES 2 BATTERY
- IP68 RATED ABLE TO OPERATE IN HAZARDOUS ENVIRONMENTS
- WHEN COMBINED WITH IMPRES 2 CHARGER INCREASES LIFE BY 60%
- CHARGING/ RECONDITIONING BANKS LOCATED AT BATTALION HQ'S.
- PRESS SIDE TABS AND SLIDE DOWN TO REMOVE.











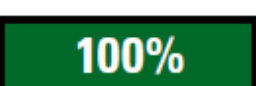







# BATTERIES AND BELT CLIPS

- DONT SWAP BATTERIES BETWEEN APX8000 AND APX6000 RADIOS
- OLDER IMPRES BATTERIES WONT WORK ON THE NEW APX8000
- APX8000 RADIOS WILL COME WITH THE GREY BOTTOM BATTERY ON THE RIGHT, INTRINSICALLY SAFE
- BE SURE YOUR BATTERY IS AN **IMPRES 2**



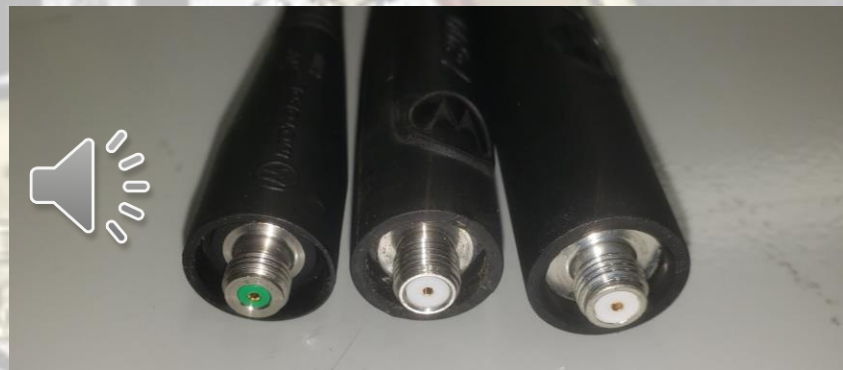
# BATTERIES AND BELT CLIPS

-  + 	<b>SINGLE GREEN FLASH</b>
-  + 	<b>FLASHING RED</b>
-  + 	<b>FLASHING ORANGE</b>
-  + 	<b>STEADY RED</b>
-  + 	<b>FLASHING GREEN</b>
-  + 	<b>STEADY GREEN</b>
-  + 	<b>FLASHING RED/GREEN</b>
-  + 	<b>STEADY ORANGE</b>

Charge indicator	Description
SINGLE GREEN FLASH	Charger has successfully powered up
FLASHING RED	Battery is unchargeable or not making proper contact with the charger
FLASHING ORANGE	Battery is recognised by charger but is waiting to charge. (Either the battery voltage is too low or the battery temperature is too low or too high to allow charging. When this condition is corrected, the battery will automatically begin charging)
STEADY RED	Battery is in rapid charge mode
FLASHING GREEN	Battery has completed rapid charge to 90% capacity, leave in charger to complete the charge
STEADY GREEN	Battery has completed charging and is 100% charged
FLASHING RED/GREEN	Battery has completed charging and is fully charged. Battery continues to be useable, but may be nearing the end of its rated service life.
STEADY ORANGE	Battery is in recondition or initialisation mode. The length of time the charger remains in this mode depends upon the state of charge remaining in the battery when inserted. (Fully charged batteries require more time to recondition, 8 to 12 hours or more, than fully discharged batteries)

# ANTENNAS

- GREEN OR RED BASE FOR XTS RADIOS
- WHITE BASE FOR APX
- ANTENNAS LABELED AT BASE FOR FUNCTION, 7/800 MHZ, VHF, GPS
- APX 8000'S "VHF/ 7-800 GPS" BROADER ANTENNA
- APX 6000'S "7-800 GPS"



# **BATTERIES AND BELT CLIPS**

- 2 BELT CLIPS SUPPLIED AND APPROVED BY SDFD
- **THE TALON**
- **MOTOROLA**



# CLEANING & DISINFECTING

- GENERAL CLEANING; USE 0.5% DETERGENT (1 TEA SPOON DISH SOAP)/ WATER SOLUTION AND SOFT BRISTLE BRUSH.
- CONNECT SPEAKER MIC TO RADIO TO ENSURE CONNECTION DOESN'T GET WET.
- DISINFECTING; USE 70% ISOPROPYL ALCOHOL (Blue wipes), APPLY TO TOWEL AND WIPE RADIO
- **DO NOT USE BLEACH, SOLVENTS, OR CLEANING SPRAYS**



# **THE END**

- **ANY QUESTIONS CONTACT YOUR LOCAL COMMS SPECIALIST**

