

Here are the most important controls and operations of your new APX6000 portable radio:

	Battery-Side View	Display-Side View
Radio Controls	<ul style="list-style-type: none"> 16 Position Rotary Knob (Select Channel Zone) Orange Button (Emergency) On/Off/ Volume Top Side Button (Backlight / Invert Top Display) Push-to-Talk (PTT) Middle Side Button (Channel Up) Bottom Side Button (Channel Down) 	<ul style="list-style-type: none"> Concentric Switch (Keypad, Side Channel & Mi Channel Lock) A-B-C Switch (No function) Main Display Menu Options Menu Select Buttons 4-Way Navigation (Move Left/Right) Alpha & Numeric Keypad Keys 1-6 are MS-1 thru 6 Home Button (Go to Fire-1 or Exit a Menu)
	<ul style="list-style-type: none"> Top Display 	
	<div style="border: 1px solid black; padding: 5px;"> <p>Speaker-Mic View</p> <ul style="list-style-type: none"> Emergency BT and TX/RX LEDs Volume Up-Down PTT Channel Up 16 Position Rotary (Select a Zone) </div>	

Here are what the icons on the display screen mean (note: icons on top display are in black/white only)



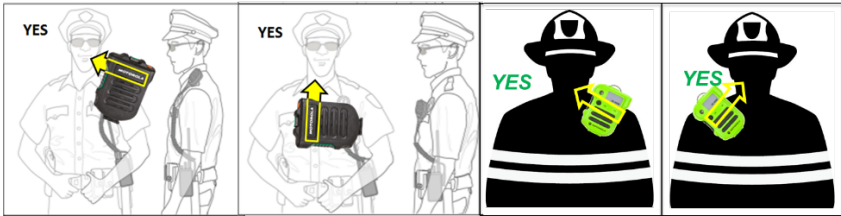



Screen Icons	Radio Receiving	Radio Transmitting	Battery Level	Signal Strength	Roaming Mode	Scanning is On	High or Low Power	Encrypted Talkgroup	Direct/Non Repeater	GPS Lock (when solid)

	Feature	How to Perform
Performing Features & Operations	<u>Change Zones</u>	<ol style="list-style-type: none"> Use the 16-position rotary knob, or Select ZONE from the Menu Options, then use 4-Way Nav Buttons to scroll up/down highlight the desired talkgroup/channel, then press "SEL"
	<u>Select a Talkgroup/ Channel in a Zone</u>	<ol style="list-style-type: none"> Select CHAN from the Menu Options, then use the 4-Way Nav Buttons to scroll up/down highlight the desired talkgroup/channel, then press "SEL" Use the Channel Up and Channel Down buttons on the side of the radio (below the PTT) Use the Channel Up button on the speaker mic (note: Channel Up will 'wrap around' to bottom of list)
	<u>Initiate an Emergency Call & End an Emergency Call</u>	Press and hold the Orange Button for 3 seconds, then get 10 seconds of automatic "hot mic" transmission. Once emergency is resolved, the initiating radio user must press & hold the Orange Button for 3.5 seconds
	<u>Lock/Unlock Controls</u>	Short press the top side button to lock and unlock
	<u>Update your Status</u>	<ol style="list-style-type: none"> Select STS from the Menu Options, then use the 4-Way Nav Buttons to highlight your status Select "SEL" to send the highlighted status – Status on Mobiles, Command & Officers Portables Only.
	<u>Turn Scan On or Off</u>	Select SCAN from the Menu Options to enable and disable scan
	<u>Add A Talkgroup to the Scan List</u>	<ol style="list-style-type: none"> Select SCNL from the Menu Options, then use the 4-Way Nav Buttons to scroll up/down to view / highlight available talkgroups Then, press the Menu Button below "SEL" to add the highlighted talkgroup to the scan list Select "DEL" to delete a highlighted talkgroup from the scan list, use "RCL" to recall/review the list
	<u>Mute Tones & Annunciations</u>	Select MUTE from the Menu Options to enable/disable voice annunciations and keypad tones
	<u>Mode Select (MS1 through MS6)</u>	The front keypad keys 1 through 6 can preset MS1 through MS6 and can be programmed like car stereo "presets" buttons. Push and hold keypad keys 1 through 6 to set that Option to the talkgroup/channel you are using. Once set, press it again to jump back to it if you are on another talkgroup/channel,
	<u>View or Set Clock</u>	Select CLCK from the Menu Options, then use the up/down arrows to view and set the time and date
<u>Search for a Channel by Name</u>	<ol style="list-style-type: none"> Select CHSR from the Menu Options, then press the "#" keypad key to allow you to use the keypad to enter alphabetical characters Use the keypad to enter characters from the name of the channel/talkgroup you want to find (press "2" once for the letter "A", twice for "B", etc.) 	
<u>View / Configure Bluetooth Options</u>	Select BT from the Menu Options, then follow prompts to turn Bluetooth off/on and to search for and connect to external devices. Note: Bluetooth does not work with all consumer devices.	
<u>Exit a Menu Option</u>	Press the "home" key to exit any Menu Option	

New Motorola APX6000 portable and mobile radios are being deployed operate on the new, digital system known as CCD P25 (no longer analog). Much will stay the same but there are two significant differences that will affect how you use your radio:

- ❶ Although it's digital, it's not "high-def". Your voice is digitally coded/decoded for all transmissions. Voices may sound different & it may be initially difficult to identify other radio users. Over time, your ear will 'tune' to digital.
- ❷ CCD P25 was designed to provide better coverage than the old analog system. Digital audio quality stays constant even in areas of weaker signal but it becomes 'robotic' or silent past the very fringe of coverage (whereas analog had 'static' with weak signals).









Following these instructions will enhance the quality of your transmissions and assure they are understood!

DO	Do Not!
<p>Leave your hand off the speaker grill area of the speaker-mic – that entire area is the microphone. Also, if you can, shield the speaker-mic from noise by cupping the back of it with your hand.</p>	<p><i>Do not cover the grill area of the speaker-mic with your hand.</i></p>
	
<p>Angle the speaker-mic so that the top corner (the "M" or the "A" in Motorola) are pointed toward your mouth.</p>	<p><i>Do not let speaker-mic dangle by its cord with top corner pointing down.</i></p>
	
<p>Hold the speaker-mic 2-3 inches from your mouth, turn your mouth to it, and speak directly into it. For SCBA, move the speaker-mic to the voice port.</p>	<p><i>Do not hold the mic at arm's length or look away from it when you talk.</i></p>
	
<p>Speak loudly, clearly, and slowly into the speaker-mic ESPECIALLY IN AREAS OF HIGH BACKGROUND NOISE. Project your voice but don't shout.</p>	<p><i>Do not mumble, whisper, or shout. Do not point the mic toward noise.</i></p>
<p>Position the mic so that your voice is on one side and sources of high noise are on the other.</p>	<p><i>Aim the mic at high noise.</i></p>
<p>Push-to-Talk and then WAIT for a "talk permit tone" (quick triple beep) before talking. This may take about one half second.</p>	<p><i>Do not start talking immediately after you PTT.</i></p>

Motorola APX portable radios use intelligent IMPRESS batteries and battery chargers that charge and recondition batteries to prolong their life. Here are some guides to charging the APX radio's battery:

1	Place the battery (or radio with battery attached) fully into the charger as shown to the right. Turn the radio off before placing it into the charger.	
2	Always charge a new battery fully before its first use.	
3	Discharge a battery as much as possible before recharging it.	
4	Recharge the battery after each shift.	

The IMPRESS battery and Motorola desktop battery charger work together to occasionally recondition the battery. This involves draining the battery before recharging it. This reconditioning minimizes the "battery memory" effect that can cause a charged battery to behave as if it were empty. Here are the indicators that may appear on the charger and what they mean:

Indicator		What it Means
IMPRESS Battery Indicators	Single Flash Green One Time 	Charger has successfully powered up
	Steady Red 	Battery is in rapid charge mode
	Steady Green 	Battery has completed charging & is fully charged
	Flashing Green 	Battery has completed rapid charge mode (approx. 90% capacity) and is in trickle or "top off" charge mode (approx. 1 hour to complete)
	Flashing Red 	Battery is un-chargeable or is not making proper contact in charger
	Steady Yellow 	Battery is being reconditioned – the time to complete reconditioning may vary and may be as long as 8 hours
	Flashing Yellow 	Battery is recognized but is waiting to be charged (due to low voltage or to excessively hot or cold temperature) – battery will charge as soon as situation is corrected
	Flashing Red & Green 	Battery may be approaching end of rated service life – this is not a fault indication, merely a notification that the battery may soon no longer be able to yield expected service and may need to be replaced

To force a change of charging modes:



- ✓ To interrupt a long reconditioning cycle and force-start a rapid charge, remove the battery from the charger and reinsert it within 5 seconds.
- ✓ To interrupt a rapid charging cycle and force-start a reconditioning cycle, within 2.5 minutes of initial insertion into the charger, remove and reinsert it within 5 seconds.

To remove the battery, turn the radio off, then squeeze the release latches at the bottom of the battery until the battery releases. Slide the battery away from the radio. To attach a battery, again make sure the radio is off, then slide the battery into the radio's frame until side latches click into place and you hear two firm clicks.

The new CCDP25 radio system has some of the same and some different failure modes (ways of operating during failures of system equipment). The system is designed to be highly reliable so it's unlikely you'll encounter them and if they happen they won't last long. Here are descriptions:

	Failsoft	Site Trunking
	Very similar to failsoft on the analog system.	A new failure-mode for CCDP25.
Effects	The system's channels operate in conventional mode (<i>shared channels with no trunking features</i>) & agencies are grouped together on them. The 9-1-1 dispatch center will use backup control stations and will lose wireline-dispatch features.	Each set of sites (city sites and mountain site) operate in trunking mode (<i>channels assigned to specific groups, with features</i>) except: <ol style="list-style-type: none"> i) users on one set of sites cannot communicate with radios on the other and ii) dispatchers may need to use backup control stations to reach some users and may lose wireline-dispatch features.
Note	<i>A 9-1-1 dispatcher using a backup control station will lose the following features; dispatcher priority, dispatcher full duplex, aliases, and emergency alarm (display of alias and visual alert during on emergency button), the ability to create patches. They may also not be able to access some of the lesser-used interoperability talkgroups.</i>	

APX Subscriber Radio Details

	Failsoft	Site Trunking
How to ID	<p><u>Audible:</u> quick "triple beep" every 10 seconds</p> <p><u>Visual:</u> FAILSOFT on displays</p> 	<p><u>Audible:</u> no indication</p> <p><u>Visual:</u> STE TRNK on top display, SITE TRUNKING on main display</p> 
What do to	<ol style="list-style-type: none"> 1) Recognize you're using conventional radio operations; people can talk over each other and you might hear other user groups on your channel 2) Exercise "comms brevity", communicate only critical info and be brief 3) Know that dispatch is basically operating as a radio user, they don't have full functionality 4) Follow specific instructions from dispatch 5) Be patient; dispatch and the Electronic Engineering Bureau know of the problem and are working to restore service 	<ol style="list-style-type: none"> 1) Recognize you might not be talking to everyone in your group 2) Know that dispatch is basically operating as a radio user, they don't have full functionality 3) Follow specific instructions from dispatch 4) Be patient; dispatch and the Electronic Engineering Bureau know of the problem and are working to restore service