

*San Diego Fire-Rescue Department*

# **Kenwood TK-790 VHF Mobile Radio Training**



# Objectives

- **Review basic specifications & features**
- **Learn to switch between groups**
- **Learn to create and alter a scan list**
- **Learn to create a command group**
- **Learn to select a tone**
- **View the current VHF radio fleet map**

# Specifications & Features

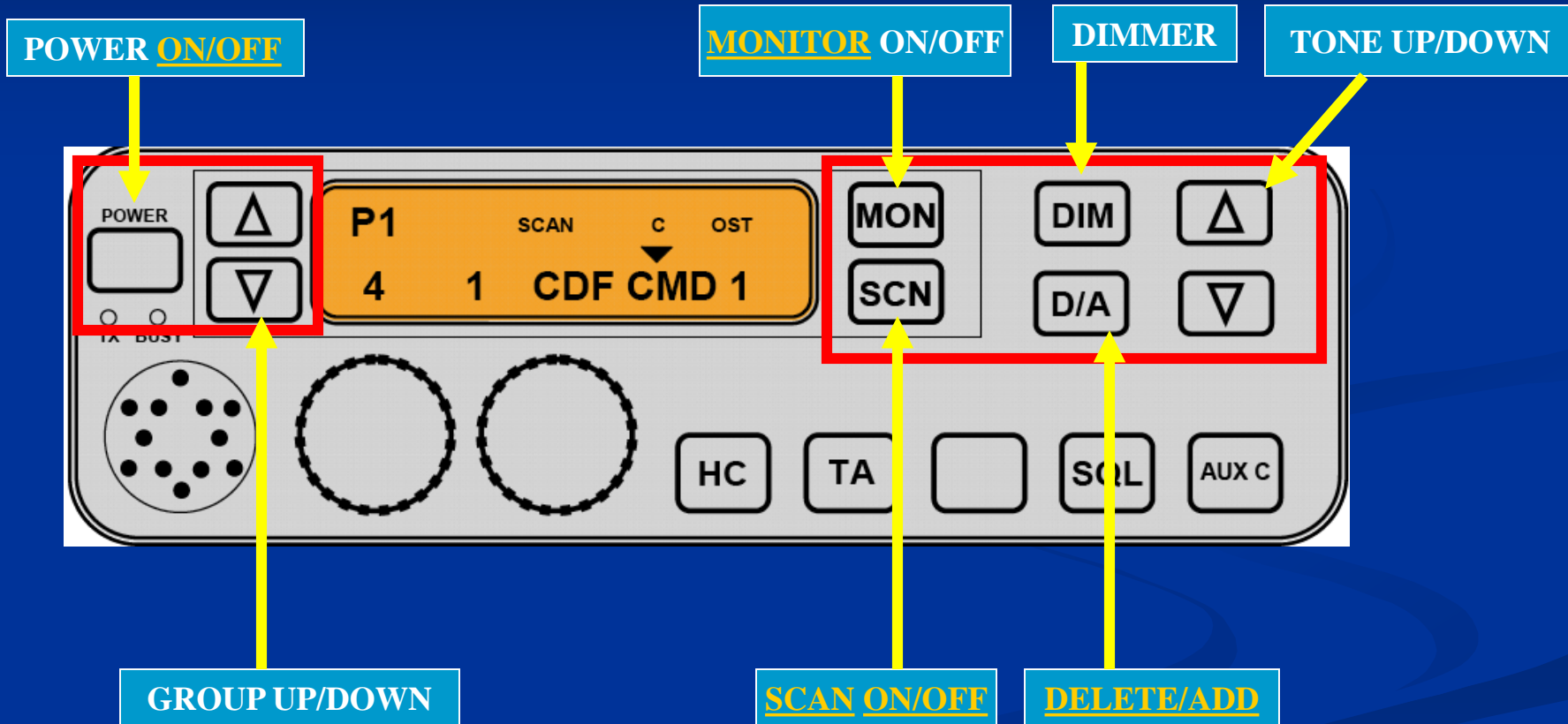
## Kenwood TK-790 Mobile Radio Features

- **254 Channel capability**
- **15 group radio fleet map, the same as the Bendix King portable radio**
- **Alpha-numeric display**
- **45 Watts power output**
- **1 group user modifiable (COMMAND GROUP SCAN)**
- **16 Repeater tones available**
- **1 Direct access channel button (Home Channel)**

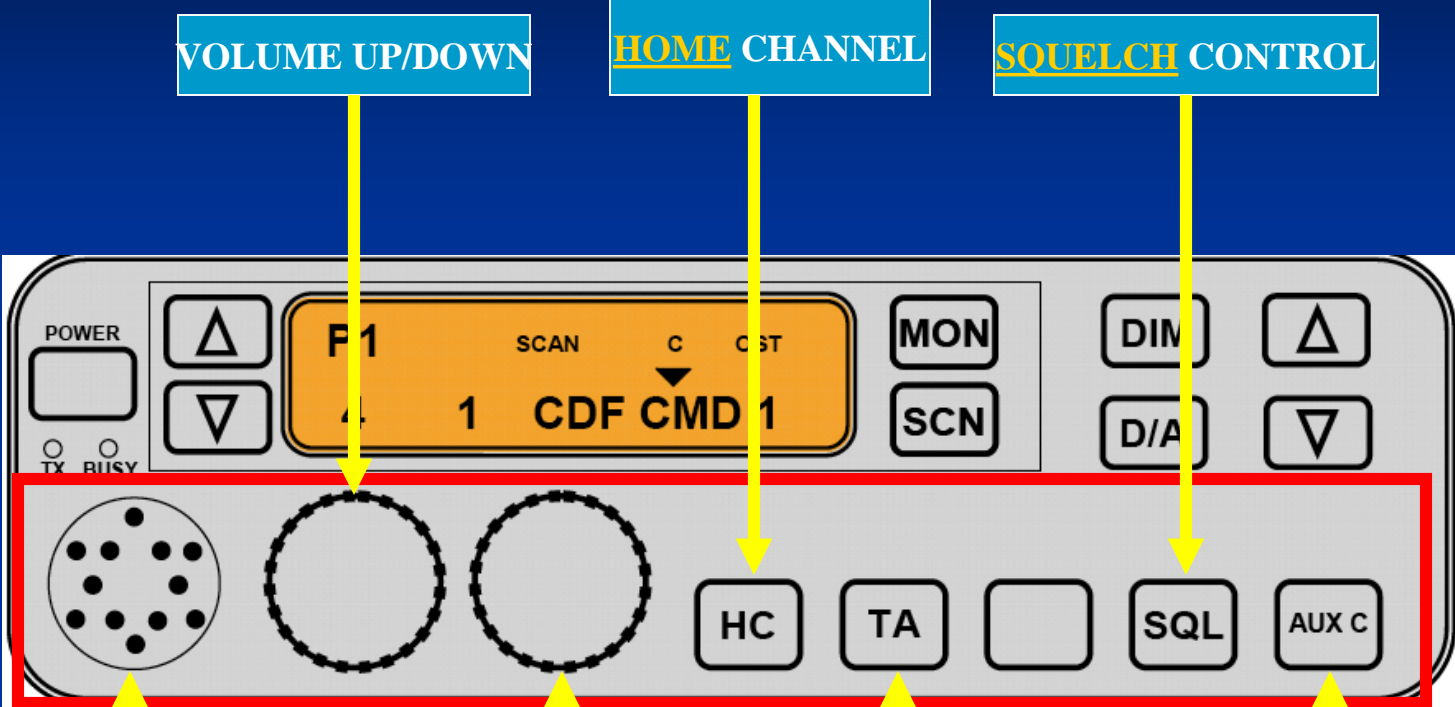
# Kenwood TK-790 Cal Fire Mobile Radio Operations

- **Power [POWER]** - Push this button once to turn on the radio and push again to turn off. Note: The Kenwood Mobile radio is designed not to lose any operator selectable features on power down. The radio will “remember” what it is last told to do upon re-power
- **Group up and down arrows [▲] [▼]** - These two buttons control the group locations and are located just to the right of the power button. Press the up arrow to go up from groups 1 thru 20. Press the down arrow to go from groups 20 down to 1. Pushing again below group 1 puts you into the “Command Group”. (If the command group has been created by the operator)
- **Home Channel [HC]** - This button is used if you want to go to your home channel. Pressing this button will take you directly to your Home Channel, from any group in the radio. When this button is pushed again, it takes you back to the last group and channel you were on
- **Talk Around [TA]** - To talk directly to another radio without using a repeater (car to car), press the [ TA ] button. Notice the TA symbol in the display
- **Squelch [SQL]** - To adjust the squelch, press the [SQL] button. The squelch can then be adjusted by turning the channel selector. Once the squelch is set, press the [SQL] button again to resume normal operation
- **Command Group [AUX C]** - Press this button to add or delete a channel from the command group. This feature is discussed further in these instructions

# KENWOOD MOBILE RADIO CONTROL HEAD (TOP HALF)



# KENWOOD MOBILE RADIO CONTROL HEAD (LOWER HALF)



MIC CONNECTOR

CHANNEL UP/DOWN

TALK AROUND  
DIRECT

COMMAND GROUP  
ADD/DELETE

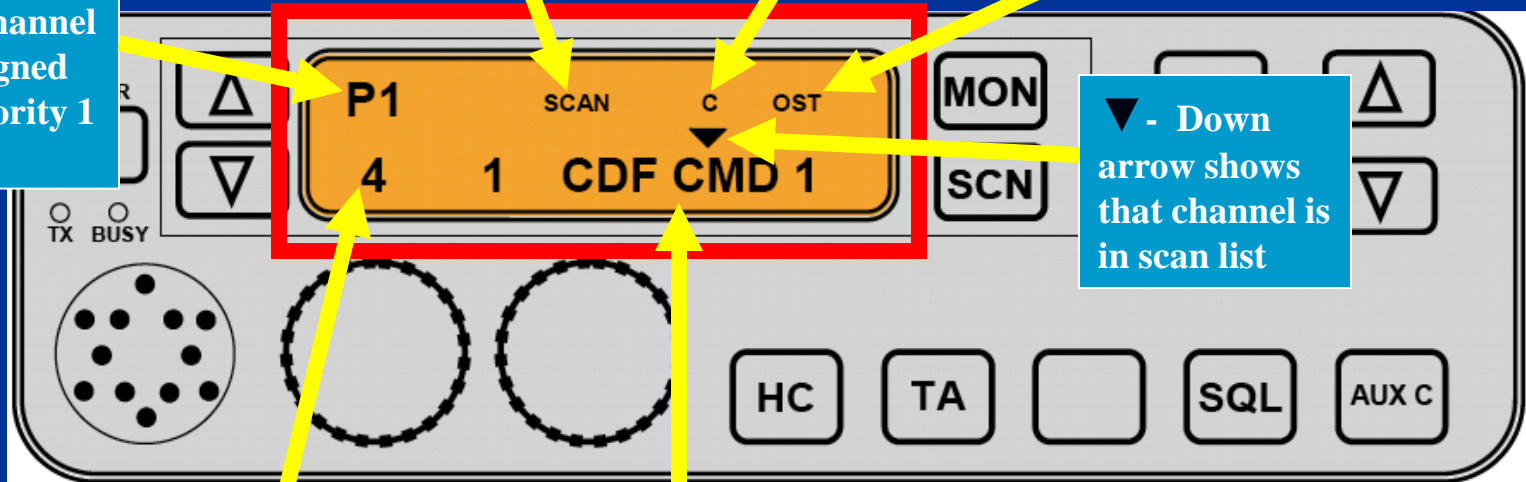
# DISPLAY AREA

**SCAN-**  
Shows that the scan feature is activated

**©-** Shows Command group is currently selected

**OST-** “Operator Selectable Tone” Shows that a tone as been selected

**P1-** Shows that channel is assigned as Priority 1



**▼ -** Down arrow shows that channel is in scan list

**4 -** Group number

**1 CDF CMD 1-**  
Channel number and name displayed with up to 11 characters

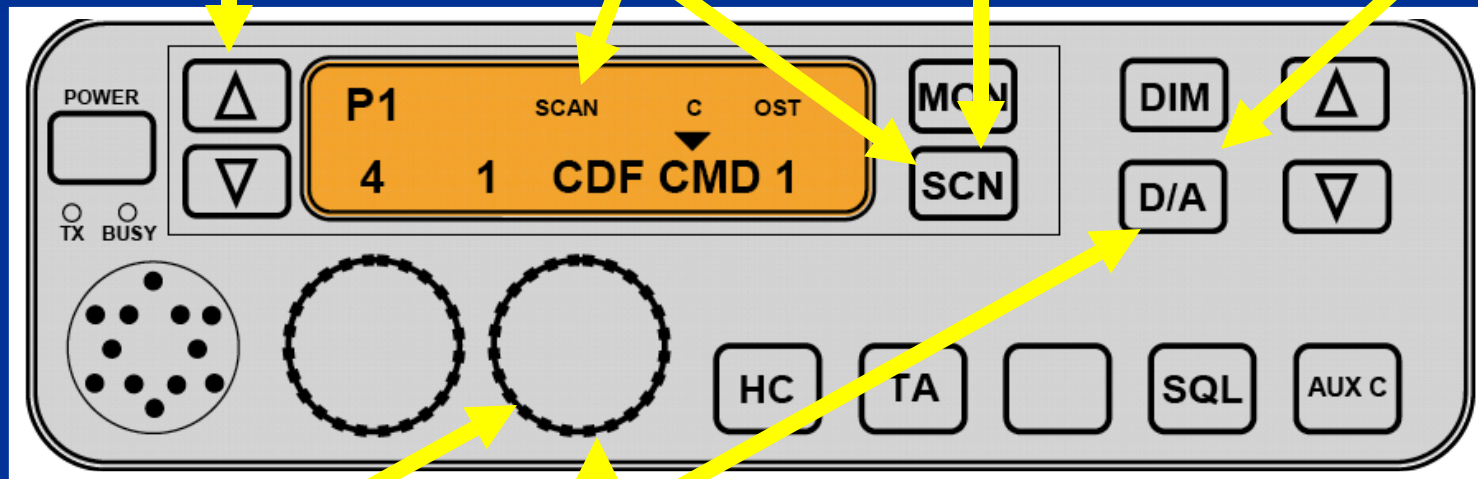
# Scanning Function

**1.** Confirm which group you are going to scan

**6.** Press **SCAN** to start the scanning sequence, **SCAN** icon will appear

**2.** Make sure **SCAN** is **OFF** (Press) **SCAN** button

**4.** Press **D/A** button. The down arrow icon appears in the display, that channel is now in the scan list



**3.** Rotate channel **SELECTOR** knob to the channel you want to add to scan

**5.** Move on to the next channels to add, repeat number (4.) until all desired channels are selected

**Note: You can only scan one group at a time. You cannot scan multiple groups**



# Priority Scan Mode

This radio has the capability of two levels of Priority Scanning, called Priority 1 and Priority 2.

- Priority 1 takes precedence over all other scanned channels in the group including Priority 2
- Priority 2 takes over all scanned channels except Priority 1
- This means you now have a way to have any number of channels in scan and have two levels of priority

An example of this would be setting up a scan group on an incident with Command and Tactical channel as Priority 1 and 2 along with other lesser priority channels in the Scan group.

The Priority 1 channel Assignment can be selected by turning the scan [SCN] button off and simply selecting the channel and pressing the scan [SCN] button on

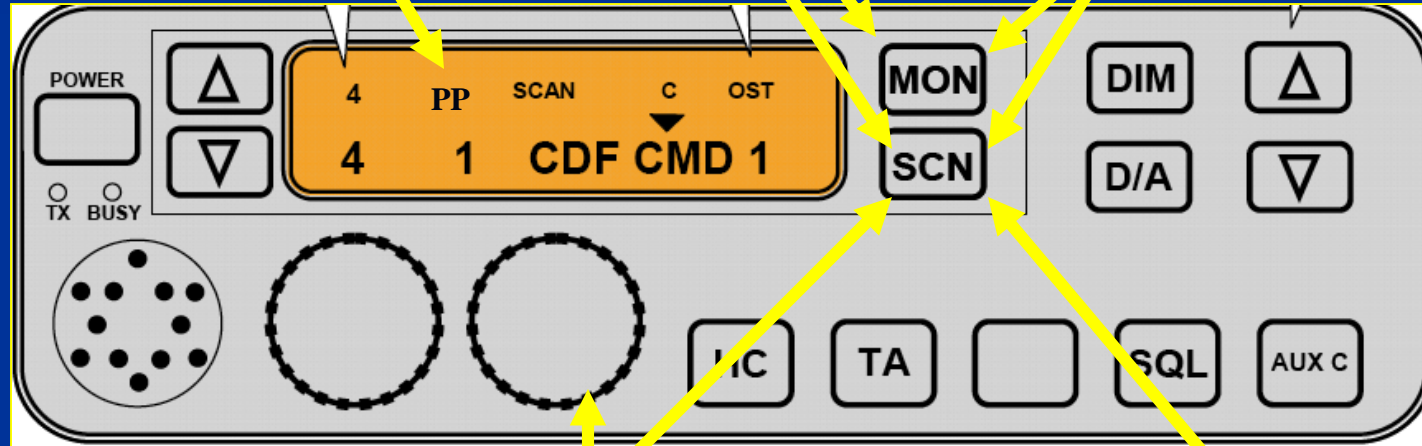
**Note: To activate any of the Scan or Priority features or to change any feature of scan or priority, the SCAN feature must be turned off.**

# Priority Scan Mode

**4.** The icon [PP] which stands for Programmable Priority should show up in the display

**5.** To delete the press and hold the scan [SCN] button down and press the monitor [MON] button twice

**3.** Selecting the desired channel, then press and hold the scan [SCN] button down and press the monitor [MON] button twice



**1.** The Priority 1 channel is by default the channel you have selected in the display before pressing the scan button. In other words, when you want a specific channel to be priority, rotate the channel selector to that channel and stop, press [SCN]. This channel is now your Priority 1 channel.

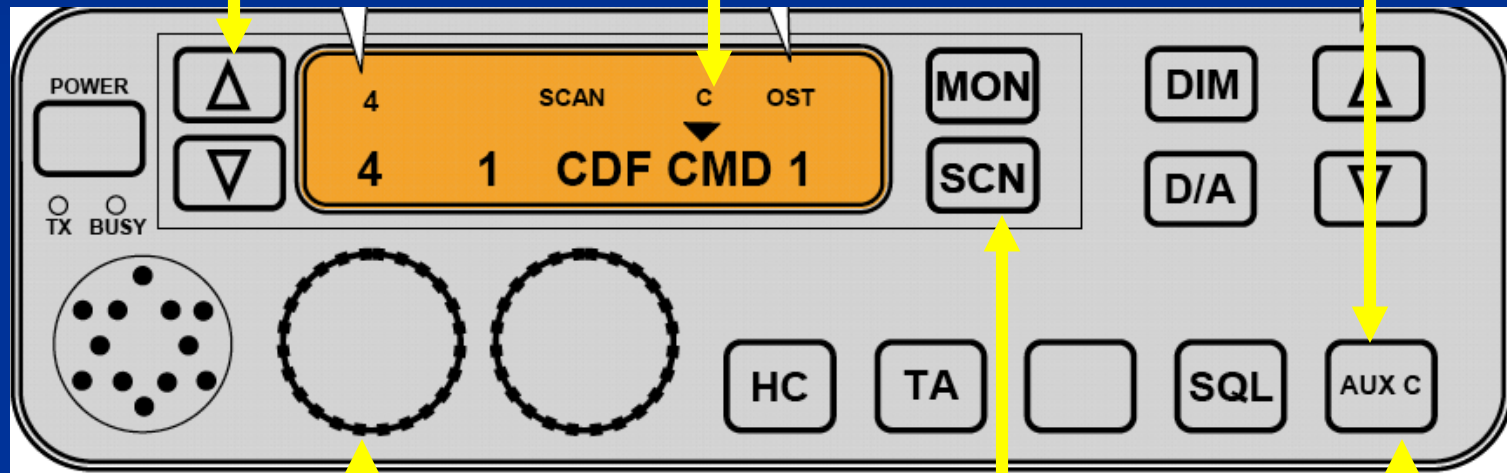
**2.** The Priority 2 Channel Assignment can be selected by turning the scan [SCN] button off

# Command Groups

**4.** Press this down arrow until a beep sounds and the © icon appears in the display. You are now in the “operator built” command group

**5.** This Icon will be displayed if Command group selected and disappear when the group is deleted

**3.** Press and hold the [AUX C] button until you hear a short beep and a momentary © icon appears on the display.



**2.** Use the channel select knob to dial up the desired channel to add to the command group from any group in the radio.

**1.** To use this command group, first turn the Scan off.

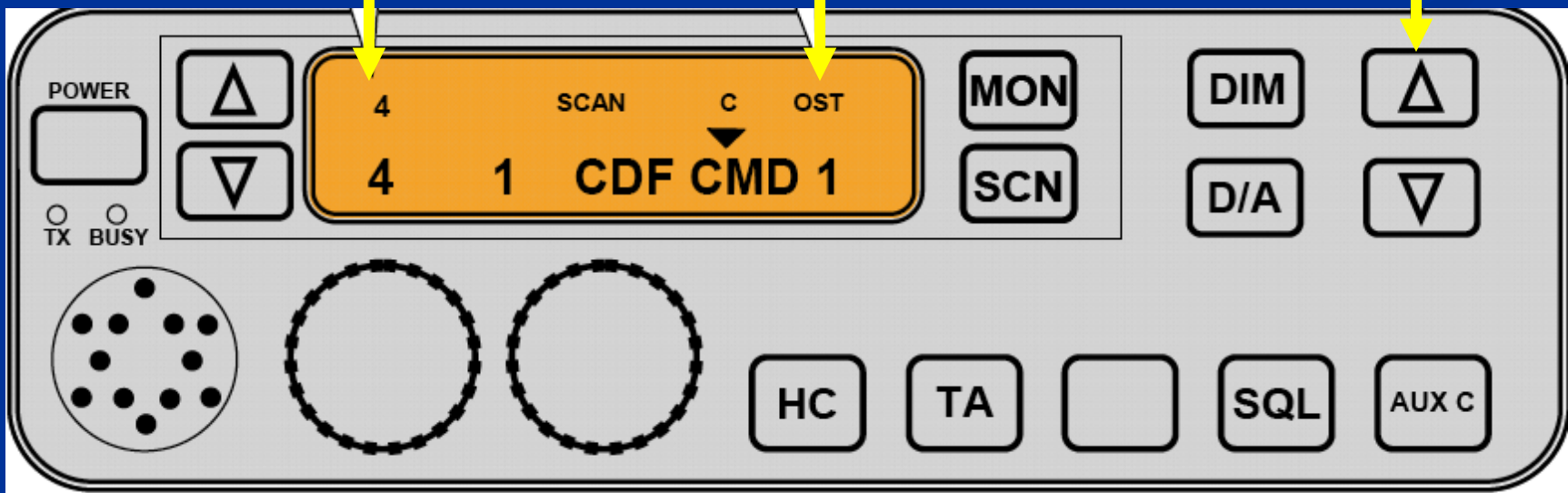
**6.** To remove channels from the command group press [AUX C] until the channel disappears and you hear a short beep.

# Selecting Tones

TONE CURRENTLY  
SELECTED ON  
CHANNEL

THIS IS A REMINDER THAT  
OST IS ON: OPERATER  
SELECTABLE TONE (PRE-  
PROGRAMMED TONES FOR  
CERTAIN CHANNELS – SDFD  
1,2, AND 4, TONE 8

SELECT DESIRED  
TONE USING THESE  
ARROW KEYS



# Tone Selection in the Kenwood

- When selecting a tone, the tone is selected per channel (not group like the King radio)
- This makes it easier to select the tone for each channel and does not require changing it each time