

EPH/EPI SERIES PORTABLE RADIO



BENDIX/KING

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BENDIX/KING

Courtesy of:
Simpson260.com

Thanks To: Jerry Brown

TABLE OF CONTENTS

Introduction	1
Basic Operation	2
Radio Controls	3
Code Guard Operation	4
Built-In Features	5
Alphanumeric Display	6
Channel Groups	7
Scan Operation	8
Priority Scan	10
User Selected Code Guard	14
Busy Channel	15
UCOM Options	16
Battery Installation	20
Service	20

INTRODUCTION

CONGRATULATIONS, you now own a Bendix/King E-Series portable VHF radio. This synthesized portable utilizes a microprocessor core allowing features and performance previously unavailable in a handheld two-way radio. It has been designed to meet the tough requirements of today's communications environment. Please take a moment to acquaint yourself with the information in this manual to assure optimum performance from your new radio.

FCC REQUIREMENTS

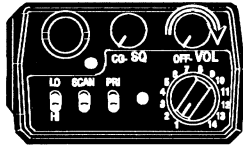
Your radio must be properly licensed by the Federal Communications Commission prior to use. Your Bendix/King dealer can assist you in meeting these requirements. Your dealer will program each radio with your authorized frequencies, signaling codes, etc., and will be there to meet your communications needs as your system expands.

SAFETY PRECAUTIONS

- A. Do not operate the transmitter in close proximity to blasting caps.
- B. Do not operate the radio in an explosive atmosphere (petroleum fuels, solvents, dust, etc.) unless it is an intrinsically safe model designed for such use.

BASIC OPERATION

RECEIVE

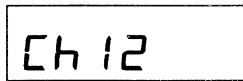


TURN POWER ON by turning the Volume knob clockwise past the OFF detent. A beep sounds, indicating the radio is operational. The LCD, if installed, displays the current channel.

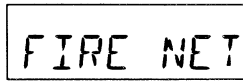
SELECT A CHANNEL by turning the Channel Selector knob.

ADJUST SQUELCH AND VOLUME by turning the Squelch knob clockwise until a rushing noise is heard. Set the volume to a comfortable level, then turn the Squelch knob counterclockwise until the noise stops. This is called the threshold squelch setting.

Turning the Squelch knob fully counterclockwise past the detent places the receiver in Code Guard mode. A message will be heard only when the proper Code Guard value is received.

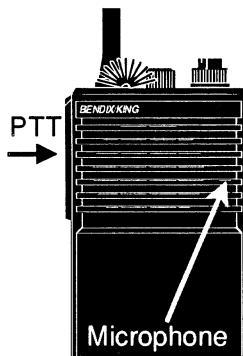


7-SEGMENT DISPLAY



ALPHANUMERIC DISPLAY

TRANSMIT



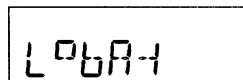
PRESS THE PTT (Push To Talk) switch. When the transmitter is on, the red Transmit Indicator glows and the TX annunciator on the LCD appears.

TALK IN A NORMAL VOICE with the microphone one to two inches from your mouth.

RELEASE THE PTT switch to stop transmitting.

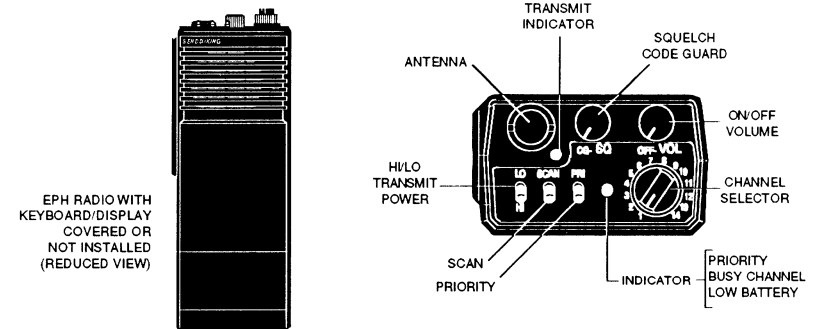
If the Transmit Indicator does not glow when you press the PTT Switch, the battery pack may need to be charged; if so, the LCD will display **Lobat** and the yellow Low Battery Indicator will flash. If the Transmit Indicator does not glow and a tone sounds, you are on a receive-only channel, or the channel is busy (if Busy Channel Lockout is installed). Select an authorized transmit channel.

If the length of your message exceeds the preset time out timer setting, the transmitter automatically shuts off and a tone sounds. To continue the transmission, release the PTT switch, then press it again and continue talking.

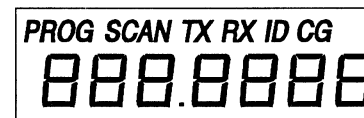
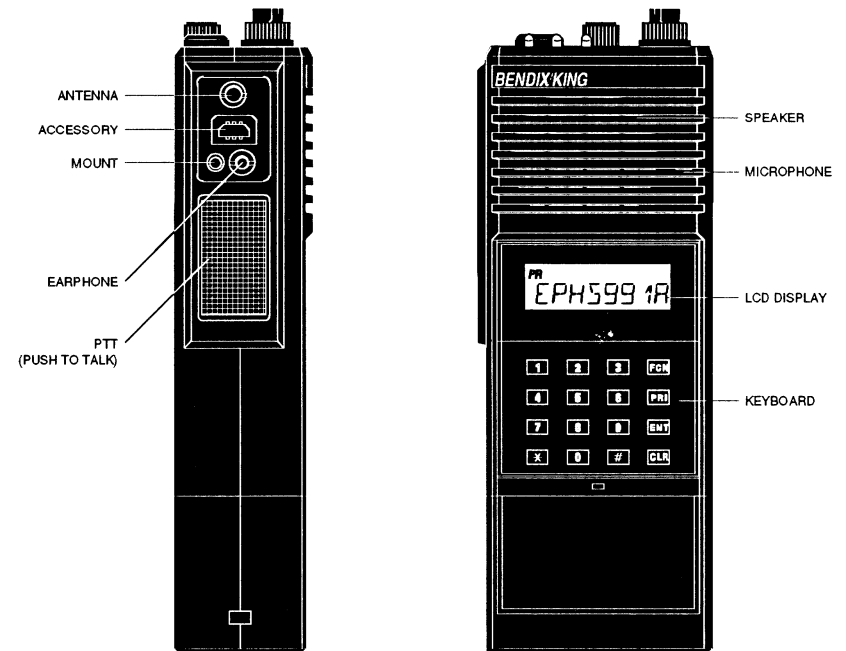


LOW BATTERY POWER

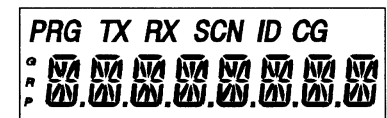
RADIO CONTROLS



EPH RADIO WITH KEYBOARD/DISPLAY COVERED OR NOT INSTALLED (REDUCED VIEW)



7-SEGMENT DISPLAY

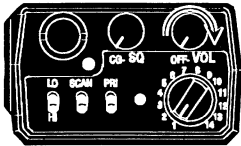


ALPHANUMERIC DISPLAY

CODE GUARD OPERATION

Code Guard™ allows one radio or group of radios to be selectively called within a system. If the radio has been programmed with Code Guard, use the following receive and transmit instructions.

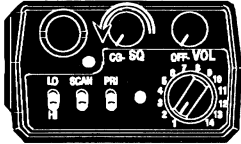
CODE GUARD RECEIVE



TURN POWER ON by turning the Volume knob clockwise past the OFF detent.

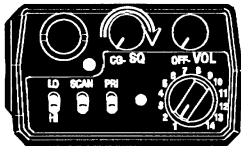
SELECT A CODE GUARD CHANNEL by turning the Channel Selector knob.

ADJUST VOLUME by turning the Squelch knob clockwise until a rushing noise is heard, then turning the Volume knob to a comfortable level.



SET CODE GUARD MODE by turning the Squelch knob completely counterclockwise, past the detent. A message will be heard only when the proper Code Guard value is received.

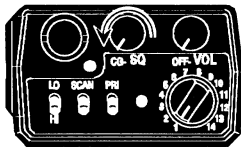
CODE GUARD TRANSMIT



TURN THE SQUELCH KNOB clockwise, off the detent.

MONITOR THE CODE GUARD CHANNEL before transmitting.

PRESS THE PTT (Push To Talk) switch if the channel is not busy. When the transmitter is on, the red Transmit Indicator glows and the TX annunciator on the LCD appears.



RESET THE SQUELCH KNOB to the Code Guard position to receive only the messages with the proper Code Guard value. During extended transmissions the squelch can be left open until the exchange has ended.

Code Guard is a trademark of BK Radio, Inc.

BUILT-IN FEATURES

Bendix/King E-Series radios are based on a microprocessor core that allows extra features and operational characteristics to be programmed into the radio. Your dealer can help define the best operational settings for a system and program them into the radio.

HI/LO TRANSMIT POWER

Placing the HI/LO switch in the HI position (down) enables full transmitter power. The LO position (up) reduces power to the programmed low power setting, thereby reducing current drain and increasing battery life.

TIME OUT TIMER

The transmit time out timer limits the duration of calls and guards against accidentally locking on the transmitter and tying up the radio system. Your dealer can program the duration of the time out timer. (15 to 225 seconds, or disabled)

SCAN DELAY

Scan delay allows the radio to receive a response to a transmission before scanning the other channels for activity. If you find that your scanner is restarting before message replies are received, you can ask your dealer to increase the scan delay time. (0-7.5 seconds)

DTMF ENCODING

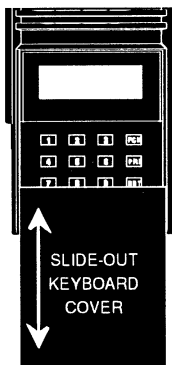
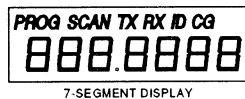
Keyboard-equipped radios can be programmed to enable DTMF encoding. To send DTMF tones (similar to the tones used by a standard pushbutton telephone) press and hold the PTT switch and press any of the keys on the keyboard. An audible sidetone is heard through the front speaker. The FCN, PRI, ENT, and CLR keys respond as DTMF tones A, B, C, and D.

ANI ENCODING

ANI encoding (automatic number identification), if enabled, transmits a sequence of DTMF tones each time the PTT switch is pressed. An audible sidetone is heard through the front speaker. Your dealer can program the ANI number to be sent.

If DTMF and ANI are both enabled, the ANI tone sequence is transmitted only after the ENT key is pressed while the PTT switch is activated. An audible sidetone is heard through the front speaker.

ALPHANUMERIC DISPLAY



The various models of E-Series portable radios are built with the following display options:

- No keyboard and no display, or
- Keyboard and Alphanumeric Display, or
- Keyboard and standard 7-Segment Display

With obvious exceptions, the operational procedures are the same for all these radios.

Radios with a keyboard and display have a slide-out keyboard cover. To remove or install the cover, turn off the radio and remove the battery (see Battery Installation, page 20).

The Alphanumeric Display has some features not found in the standard 7-Segment Display. Only those features that have been programmed in the radio are active.

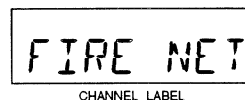
Radios with Alphanumeric Display can be programmed to operate one or more channel groups in Standard Display mode. In this mode, channel numbers and other information appear much like on a 7-Segment Display.

DISPLAY BACKLIGHTING

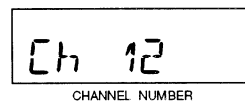
Radios with Alphanumeric Display can be programmed to backlight the display when a signal is received or when a key is pressed. The time duration of the backlighting can also be programmed.

CHANNEL LABELS

Radios with Alphanumeric Display can be programmed with a label for each channel and a label for each channel group in the radio.



In Alphanumeric Display mode, channel labels are displayed. In Standard Display mode, channel numbers are displayed instead of labels.



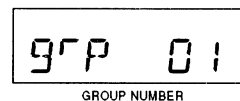
Each label can include up to eight characters, with decimal points available between characters. Characters can include A-Z, 0-9, -, *, \$, /, +, %, \, |, _, <, >, h, or a blank space.

GROUP LABELS

Alphanumeric Displays can show group labels in addition to group numbers even if the channel group is programmed for Standard Display mode.

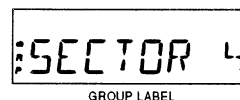
To display a group label:

TURN THE **SCAN** AND **PRI** SWITCHES OFF (down).



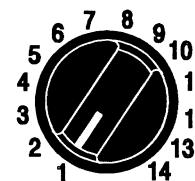
PRESS THE **#** KEY on the keyboard to display the group number.

PRESS THE **#** KEY AGAIN to display the group label.



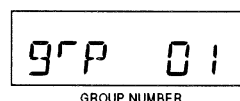
PRESS THE **ENT** KEY OR WAIT for about 5 seconds to revert to normal radio operation.

CHANNEL GROUPS



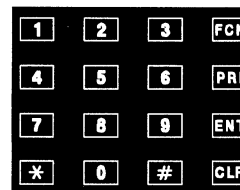
The Channel Selector knob has 14 positions. Radios with more than 14 channels are separated into "groups" of 14 channels each. Each group can be programmed to have an "individual personality" with the operational features described earlier.

SELECT A GROUP

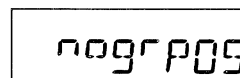


PRESS THE **#** KEY on the keyboard to display the current group number.

PRESS A **NUMBER** KEY for the new group number.

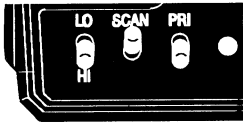


PRESS THE **ENT** KEY or wait about 5 seconds; the radio returns to normal operation for the new group, and the selected channel is displayed in the LCD. All scanning and priority functions selected affect only the channels in the group you are operating in.

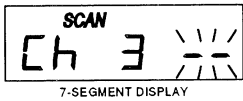


When changing groups, if a non-programmed or invalid number is selected (05 for example), the LCD displays **nogr05** (no group 05) and the radio returns to the previously selected group.

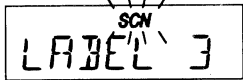
SCAN OPERATION



Turn the **SCAN** switch on (up).
Turn the **PRI** switch off (down).



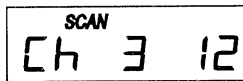
7-SEGMENT DISPLAY



ALPHANUMERIC DISPLAY

The LCD indicates Scan operation by displaying the **SCAN** annunciator and flashing — — (7-Segment Display) or the flashing **SCN** annunciator (Alphanumeric Display).

Scan operates only while the radio is not transmitting. The radio checks for signals on channels in the preset scan list, as well as the channel selected by the Channel Selector knob.



7-SEGMENT DISPLAY

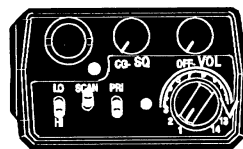


ALPHANUMERIC DISPLAY

When a signal is detected, scanning stops and the message is received. The received channel is shown on the right side of the LCD (7-Segment Display) or in place of the transmit channel (Alphanumeric Display).

Once the signal ends, the radio continues to monitor the channel for the preset scan delay time before it resumes scanning.

TRANSMIT WITH SCAN ON



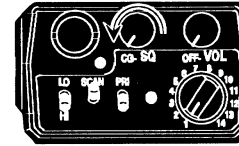
When the **SCAN** switch is on, the radio transmits on the channel selected by the Channel Selector knob.

SELECT A TRANSMIT CHANNEL by turning the Channel Selector knob.

PRESS THE PTT SWITCH and talk in a normal voice.

When the PTT switch is released, the radio continues to monitor the selected channel for the preset scan delay time before it resumes scanning.

SCAN CODE GUARD CHANNELS

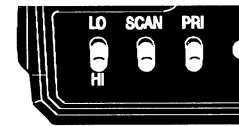


TURN THE **SCAN** SWITCH ON (up).

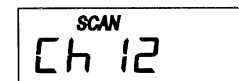
TURN THE **SQUELCH KNOB COMPLETELY COUNTER-CLOCKWISE**, past the detent. When a signal is detected, scanning stops while the radio checks for the proper Code Guard value. If the signal contains the proper Code Guard value, the radio receives the message. Otherwise, the radio resumes scanning immediately.

CHANGE THE SCAN LIST

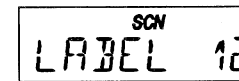
The radio can be programmed to enable the user to add or remove channels from the scan list. If user changes are enabled, follow these steps to change the scan list:



TURN THE **SCAN** AND **PRI** SWITCHES OFF (down).

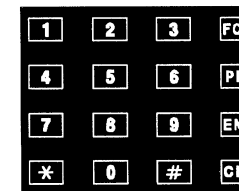


7-SEGMENT DISPLAY



ALPHANUMERIC DISPLAY

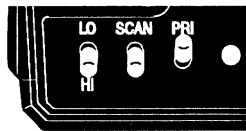
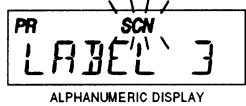
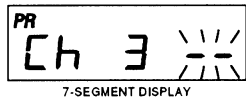
SELECT A CHANNEL to be added or removed from the scan list by turning the Channel Selector knob. If the channel is already on the scan list, the LCD annunciator **SCAN** (7-Segment Display) or **SCN** (Alphanumeric Display) appears.



PRESS THE ENT KEY to add a channel to the scan list. A short beep sounds and the LCD annunciator **SCAN** (or **SCN**) appears.

PRESS THE CLR KEY to remove a channel from the scan list. A short beep sounds and the LCD annunciator **SCAN** (or **SCN**) disappears.

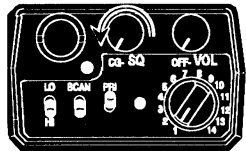
PRIORITY SCAN



Priority scan enables the radio to receive on any channel while monitoring for a message on the designated Priority Channel. The radio samples the Priority Channel at a preset rate (.25 to 3.75 seconds) regardless of activity on any other channel. Priority scan operates only while the radio is not transmitting, and can be used in combination with Scan operation.

When the PRI switch is on (up) the LCD shows the annunciator PR and flashes— (7-Segment Display) or **SCN** (Alphanumeric Display). If a message is received on the Priority Channel, the radio receiver locks onto that channel for the duration of the transmission.

PRIORITY SCAN WITH CODE GUARD



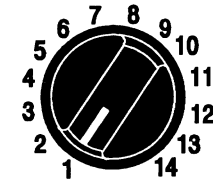
Priority scan may be used in combination with Code Guard, with the PRI switch on, the squelch knob in the Code Guard position, and the Priority Channel programmed with Code Guard. If a message is received on the Priority Channel, the radio receiver locks onto the Priority Channel for the duration of the signal. The message can be heard only if the proper Code Guard value is received. The radio resumes scanning after the message ends and the scan delay time expires.

PRIORITY MODES

The radio can be programmed with one of three priority modes: A, B, or C. The following table shows how the Priority Channel and the transmit channel are selected in each mode.

	Mode A	Mode B	Mode C
Priority Channel	Channel knob	Preset	Preset
Transmit Channel	Channel knob	Channel knob	Priority Channel

WHICH MODE IS INSTALLED

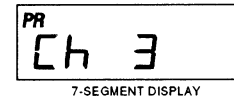


If the radio has an LCD and keyboard, follow these steps to determine which priority mode is programmed:

TURN THE **SCAN** AND **PRI** SWITCHES OFF (down).

TURN THE **CHANNEL SELECTOR KNOB**, stopping at each channel to view the LCD Display.

If the **PR** annunciator does not appear in the LCD for any channel, you have Priority Mode A.



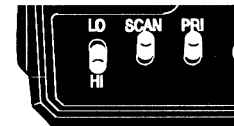
If the **PR** annunciator appears in the LCD, turn the Channel Selector knob to a different channel, then turn the PRI switch on (up).



If the LCD continues to display the knob-selected channel, you have Priority Mode B.

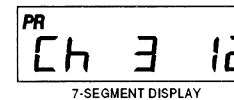
If the LCD changes to display the Priority Channel, you have Priority Mode C.

Priority Mode A with Scan

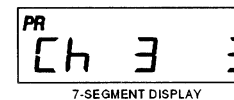
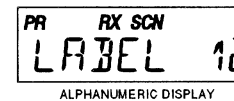


In Priority Mode A, the Priority Channel is set by the Channel Selector knob. Priority Mode A is seldom used by itself, because the radio receives and transmits only on the knob-selected channel.

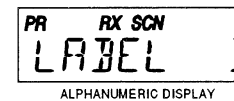
When the SCAN and PRI switches are on (up) scanning occurs until an active scan channel is found. The radio receives the message while continuing to check the Priority Channel. The LCD displays the scan channel (on the right side of 7 Segment Displays).



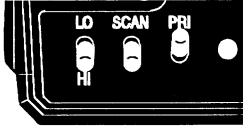
If during this message the Priority Channel becomes active, the Priority Indicator lights. The radio changes to the Priority Channel and holds for the duration of the message. The LCD displays the Priority Channel (on the right side of 7-Segment Displays).



To reply to a message on the Priority Channel, press the PTT and transmit on the Priority Channel. Once activity ceases on the Priority Channel, the radio returns to scan operation.



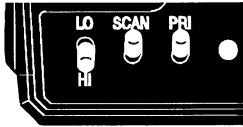
Priority Mode B



With the PRI switch on (up) and the SCAN switch off (down) the radio can receive on the knob-selected channel while sampling the Priority Channel. If the Priority Channel becomes active, the Priority Indicator lights; the radio changes to the Priority Channel and holds for the duration of the transmission.

To reply to a message on the Priority Channel, turn the Channel Selector knob to the Priority Channel, then transmit.

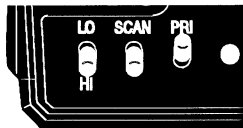
Priority Mode B with Scan



With the SCAN and PRI switches on (up), the radio scans until it locks onto an active channel. The radio continues to sample the Priority Channel while listening to the active scan channel. If activity occurs on the Priority Channel, the radio overrides the active scan channel, changes to the Priority Channel, and holds for the duration of the transmission.

To reply to a message on the Priority Channel, turn the Channel Selector knob to the Priority Channel, then transmit. Once activity has ceased on the Priority Channel, the radio returns to scan operation.

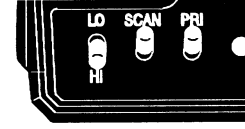
Priority Mode C



With the PRI switch on (up) and the SCAN switch off (down), the radio samples the fixed Priority Channel at the preset rate. If activity occurs on the Priority Channel, the radio changes to the Priority Channel and holds for the duration of the transmission.

To reply to a message heard on the Priority Channel, press the PTT switch. The radio transmits only on the Priority Channel when the PRI switch is on. Once activity has ceased on the Priority Channel, the radio returns to the Channel Selector knob receive channel.

Priority Mode C with Scan

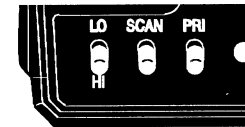


With both the SCAN and PRI switches on (up), the radio scans until it locks onto an active channel. The radio continues to sample the Priority Channel while listening to the active channel. If activity occurs on the Priority Channel, the radio overrides the active scan channel, changes to the Priority Channel and holds for the duration of the transmission.

To reply to a message heard on the Priority Channel, press the PTT switch. The radio transmits only on the Priority Channel when the PRI switch is on. Once activity has ceased on the Priority Channel, the radio returns to scan operation.

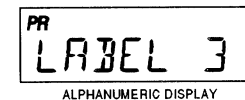
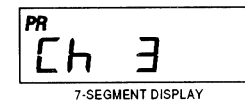
CHANGE THE PRIORITY CHANNEL

The fixed Priority Channel used in Priority Modes B and C may be permanently set or may be changeable. If the radio has a changeable Priority Channel, use the following steps to make this change.



TURN THE PRI AND SCAN SWITCHES OFF (down).

TURN THE CHANNEL SELECTOR KNOB to the channel you wish to enter as the new Priority Channel.



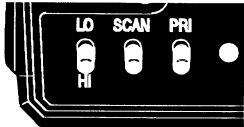
PRESS THE PRI KEY. A short beep sounds and the PR annunciator appears on the LCD, indicating that the displayed channel is now the Priority Channel.

NOTE: Only one channel at a time can be designated as the Priority Channel.

NOTE: A channel can be the Priority Channel even if it is on the scan list. Due to multiple sampling of the same channel, maximum performance occurs when the Priority Channel is not on the scan list.

USER SELECTED CODE GUARD

When the radio is being programmed with transmit and receive frequencies for each channel, a receive Code Guard value and a transmit Code Guard value can also be assigned to each channel. If User Code Guard Selection is enabled, the Code Guard values for a channel between 1 and 9 can be copied to another channel in the radio.

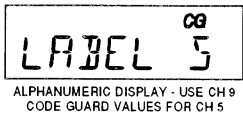
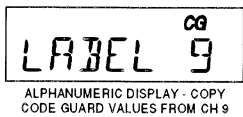
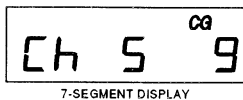


For example, to use the Code Guard values of Channel 9 with the frequencies of Channel 5:

TURN THE SCAN AND PRI SWITCHES OFF (down).

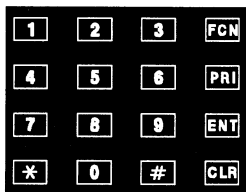
TURN THE CHANNEL SELECTOR KNOB to Channel 5.

PRESS THE 9 KEY on the keyboard. The LCD displays the **CG** annunciator.



The radio will now operate on the frequencies of Channel 5 with Channel 9 Code Guard values.

The 7-Segment Display shows the selected channel on the left (5) and the Code Guard channel on the right (9). The Alphanumeric Display shows the Code Guard channel (9) then the selected channel (5).



PRESS THE # KEY to display the Code Guard channel briefly on an Alphanumeric Display. The LCD shows the group number, followed by the Code Guard channel, then the selected channel.

PRESS THE 0 KEY to reset all values to the original programming, or press a different number key (1-9) to select a different set of Code Guard values.

NOTE: During scan or priority scan, the LCD does not display user-selected Code Guard values, nor does it access user-selected Code Guard values in scan mode.

NOTE: Once a Code Guard value has been selected with the keyboard it will not change, even if power is interrupted or the Channel Selector knob is turned.

BUSY CHANNEL

If the radio has been programmed for busy channel operation, it will operate in one of the following three modes:

BUSY CHANNEL INDICATION

The yellow Busy Channel Indicator glows if there is carrier activity on the channel selected. If the channel selected is a Code Guard channel and the proper Code Guard value is not detected, the Busy Channel Indicator remains on for the duration of the carrier activity and no message is heard. During Scan and Priority Scan operation, the Busy Channel Indicator glows when activity is detected on any channel that is on the scan list. When scanning Code Guard channels, with the Squelch knob in the Code Guard position, and activity has been detected, the Busy Channel Indicator glows for the time period necessary to determine if the proper Code Guard value has been received, causing the Busy Channel Indicator to flash at various rates. In Priority Scan operation, with the Squelch knob in the Code Guard position, the Busy Channel Indicator remains on for the duration of the carrier activity.

BUSY CHANNEL LOCKOUT

The Busy Channel Lockout feature applies only to those channels programmed for receive Code Guard operation. When carrier activity is detected on the channel selected, the radio checks the receive Code Guard value. If the proper Code Guard value is present, the radio can transmit on that channel, even if the Squelch knob is not in the Code Guard position. If the radio detects an incorrect value or carrier activity only, the transmitter is disabled, an alert tone is heard, and the display shows the word "Busy" when the PTT is pressed, whether the Squelch knob is in or out of the Code Guard detent.

Channels not programmed for receive Code Guard operation can be used to transmit regardless of carrier activity.

BUSY CHANNEL LOCKOUT OVERRIDE

This mode operates in the same manner as Busy Channel Lockout except that the user can override and transmit by turning the Squelch knob off the Code Guard detent. The transmitter is locked out only if the Squelch knob is set to the Code Guard detent.

UCOM OPTIONS

This section describes special operating procedures for radios equipped with the Universal Communications Options Module (UCOM).

UCOM is an options board that can be installed in Bendix/King E-Series portable radios. UCOM has built-in Tone Decode capability, and can be purchased with optional Inversion Scrambling.

UCOM comes from the factory ready to be programmed with the Tone Decode and/or Inversion Scrambling options to suit the user's needs. Dealers can program UCOM options by computer using UCOM Editor software (LAA 0760) and an RS-232 serial cable (LAA 0725), both available from Bendix/King.

Each heading in this section describes a typical UCOM configuration. Because of the many possible configurations, consult your dealer or communications manager to determine the actual operation procedures for your radio.

Check for Installed UCOM

To determine whether a UCOM board is installed, turn the radio on. The radio gives a power up beep and UCOM gives another beep. If the radio does not give two beeps when turned on, it is not equipped with a UCOM board. This test does not indicate whether UCOM has been programmed.

UCOM TONE DECODING

The UCOM module can be programmed to decode various tone signalling systems such as 5/6 tone (CCIR, ZVEI, EEA, etc.) and 2 tone sequential (Quik Call II, Reach, etc.). Up to 4 codesets can be controlled using the Channel Selector knob. Muting can be turned On and Off automatically by using the Channel Selector knob or manually by using a toggle switch. Muting can be combined with Code Guard operation. Channels can also be programmed for clear operation only (no tone decode).

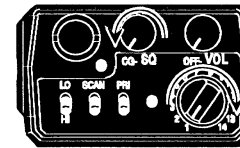
No Muting—Alert tones only

Turn the Channel Selector knob to the channel with the proper codeset. In addition to receiving messages normally, the UCOM module beeps when it receives the correct tone sequence. After 20 seconds* the radio beeps again, indicating the end of the time out period.

The UCOM module beeps every 20 seconds* to alert you that you have been called. To reset UCOM after the message, turn the Squelch knob clockwise off the detent and then back on. A beep indicates that UCOM has reset.

Before transmitting on a Code Guard channel, monitor the channel by turning the Squelch knob clockwise off the detent position.

Muting—Channel Knob



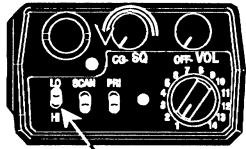
Turn the Channel Selector knob to the channel with the proper codeset. With the Squelch knob in the detent position (full counterclockwise) no traffic will be heard until the correct tone sequence is received. The UCOM module beeps when it receives the correct tone sequence, and the radio unmutes for 20 seconds*. After 20 seconds* the radio beeps again, indicating the end of the time out period, and resumes the original muting condition.

The UCOM module beeps every 20 seconds* to alert you that you have been called. To reset UCOM after the message, turn the Squelch knob off the detent and then back on. A beep indicates that UCOM has reset.

Before transmitting, monitor the channel by turning the Squelch knob clockwise off the detent position. If the channel is clear, press the PTT switch and talk, releasing the PTT switch to listen.

*The 20-second delay can be programmed to a different duration.

Muting—Toggle Switch



Muting Toggle Switch

Turn the Channel Selector knob to the channel with the proper codeset and turn the Muting (HI/LO) toggle switch on (up). With the Squelch knob in the detent position and the Muting toggle switch on (up) no traffic will be heard until the correct tone sequence is received. The UCOM module beeps when it receives the correct tone sequence, and the radio unmutes for 20 seconds*. After 20 seconds* the radio beeps again, indicating the end of the time out period, and resumes the original muting condition.

The UCOM module beeps every 20 seconds* to alert you that you have been called. To reset UCOM after the message, turn the Squelch knob off the detent and then back on, or turn the toggle switch off and then back on. A beep indicates that UCOM has reset.

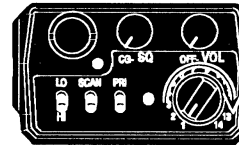
Before transmitting, monitor the channel by turning the Squelch knob clockwise off the detent position. If the channel is clear, press the PTT switch and talk, releasing the PTT switch to listen.

UCOM SCRAMBLING OPERATION

If optional Inversion Scrambling is installed, UCOM can be programmed to scramble transmit audio, making it unintelligible to the casual listener. The receiving UCOM radio unscrambles the audio using the proper code. Up to 4 codes can be controlled using the Channel Selector knob. Scrambling can be turned On and Off automatically with the Channel Selector knob or manually with a toggle switch. Scrambling can be combined with Code Guard operation. Channels can also be programmed for clear operation only (no scrambling).

*The 20-second delay can be programmed to a different duration.

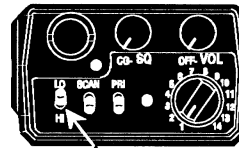
Scrambling—Channel Knob



To receive a scrambled message, turn the Channel Selector knob to the channel with the proper code. Signals with the same code will be unscrambled and heard. All other signals (including clear) will be unintelligible or distorted. To receive these other signals, turn the Channel Selector knob to the proper position.

To transmit a scrambled message, turn the Channel Selector knob to the channel with the proper code. Before transmitting on a Code Guard channel, monitor the channel by turning the Squelch knob clockwise off the detent. Regardless of the signal distortion, wait until the channel is unoccupied before transmitting.

Scrambling—Toggle Switch



Scrambler Toggle Switch

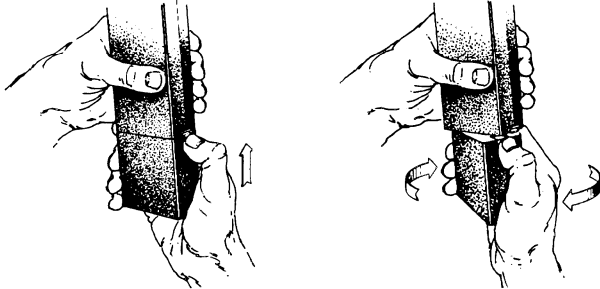
To receive a scrambled message, turn the Channel Selector knob to the channel with the proper code. Turn on the Scrambler toggle switch (the left toggle switch marked HI/LO). Signals with the correct code will be unscrambled and heard. All other signals (including clear) will be unintelligible or distorted.

To receive a signal that has not been scrambled, turn off the Scrambler toggle switch. To receive other coded traffic, turn the Channel Selector knob to the channel with the proper code and turn on the Scrambler toggle switch.

To transmit a scrambled message, turn the Channel Selector knob to the channel with the proper code, and turn on the Scrambler toggle switch. Before transmitting on a Code Guard channel, monitor the channel by turning the Squelch knob clockwise off the detent. Regardless of the signal distortion, wait until the channel is unoccupied before transmitting.

BATTERY INSTALLATION

- A. Bendix/King battery packs are available in a variety of sizes and types for special applications. Rechargeable battery packs can be charged separately or while attached to a radio.
- B. To install the battery, locate the center hub on the radio base and place it in the recess of the battery pack. Position the pack at the 30° offset, seating two metal studs in their recess. Apply upward pressure to the pack while twisting the pack to its original position. The metal tab will click, locking the pack in position.



- C. To remove the battery, turn the radio off. Push up the metal tab on the side of the case while twisting the battery pack approximately 30° and remove it from the radio.
- D. Periodically check the contacts on battery pack for dirt that may prevent a good electrical contact with the charging base.

WARNING: Do not dispose of a battery pack in fire. An explosion may occur.

WARNING: For intrinsically safe radios designed for use in hazardous environments, replacement batteries **MUST** be approved by Factory Mutual.

SERVICE

If you need service, contact your Bendix/King dealer or any other Bendix/King dealer equipped to service your radio. If you find it impractical to have service performed by your local dealer, contact Bendix/King at the address below:

BK Radio, Inc.
ATTN: Technical Services Dept.
2901 Lakeview Road, Suite 100
Lawrence, Kansas 66049
(913) 842-0402

Courtesy of:
Simpson260.com

Thanks To: Jerry Brown