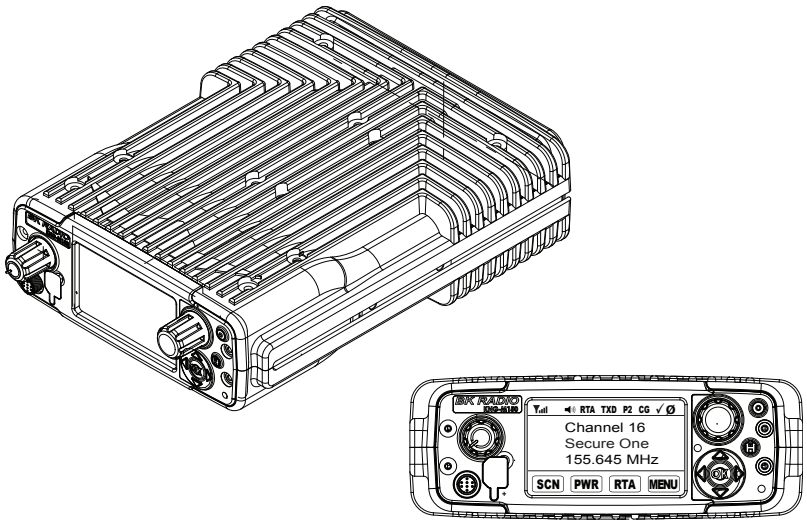
KNG Mobile Radio

Basic Functionality and Operation



BK RADIO

Preliminary

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Basic Operation

Receive

1. Turn power on by pushing and releasing the Volume knob. The radio will beep, indicating that it has passed its self test and is operational.
2. Set volume by pressing and holding the [MON] button or selecting “Monitor” from the menu list to hear squelch noise. Turn the Volume knob to set a comfortable volume level. Press the [MON] button again or select “Monitor” from the menu to stop squelch noise.
3. Select a channel zone (if applicable) by pressing the [ZONE] button. Use the PREV/NEXT buttons to select the desired channel zone. Press [ENTER] to set. Alternatively, “Zone Select” may be programmed as a menu item.
4. Select a channel by turning the Channel Selector knob. When the unstopped channel selector is rotated past the highest channel, the radio will emit a beep and wrap around to the fist channel. When rotated past the lowest (1st) channel, the radio will emit a beep and wrap to the highest programmed channel.

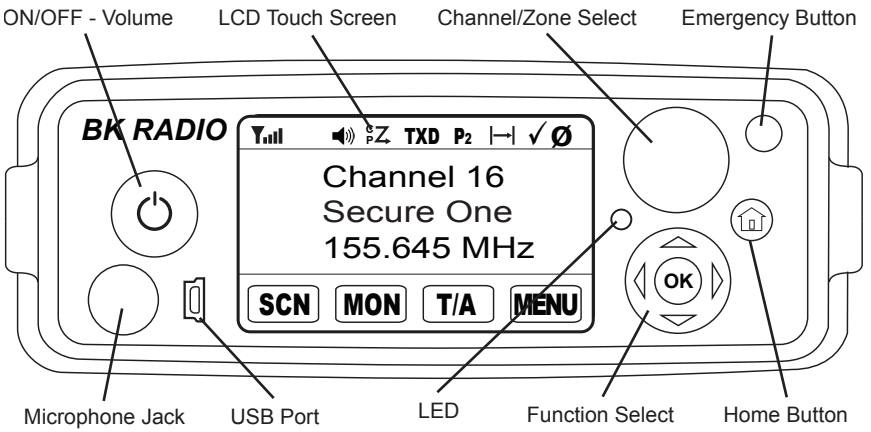
Transmit

1. Press the PTT (Push-To-Talk) switch on the microphone. The TX annunciator appears on the display and the red Transmit indicator illuminates while the PTT is pressed.
2. Talk in a normal voice with the microphone approximately one to two inches from your mouth.
3. Release the PTT switch to stop transmitting.

If the TX annunciator does not appear and a tone is heard, you are on a receive-only channel or the channel is busy (if Busy Channel Lockout is enabled). Turn the Channel Selector knob to an authorized transmit channel or wait until the channel is clear (if Busy Channel Lockout is enabled).

If the length of your transmission 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.

Radio Controls



On / Off / Volume: This control is both a push on / off button and a rotate volume knob. Pushing the button in and releasing will toggle the state of the mobile from on to off and back. Rotating this knob will increase or decrease the audio volume setting.

Microphone Jack: This connector is for attaching the microphone and certain other accessories to the mobile.

USB Port: This connector (under the cover) is for attaching a mini A/B USB connector. This is a USB client port and is used for programming / configuring the radio with the Windows PC programming software.

LCD Touch Screen: This is the color display / touch screen that is used to show the user the status and operating condition of the radio as well as receive input from the user via the touchscreen soft buttons.

LED: The LED indicator is used to show various operational states such as active receive and active transmit.

Orange Button: The orange button is a programmable function button. However, it defaults to the Emergency function which is its typical assignment.

Channel Select: The knob on the right side of the front panel is the Channel Select knob. Turn the knob to select the desired operating channel

Home: When navigating a menu pressing the Home button will exit the menu mode and return to normal radio operation.

Menu Navigation: The menu navigation pad is used to navigate the menu system. The up / down arrows will move the user to a new menu selection. The OK button selects the currently highlighted menu item.

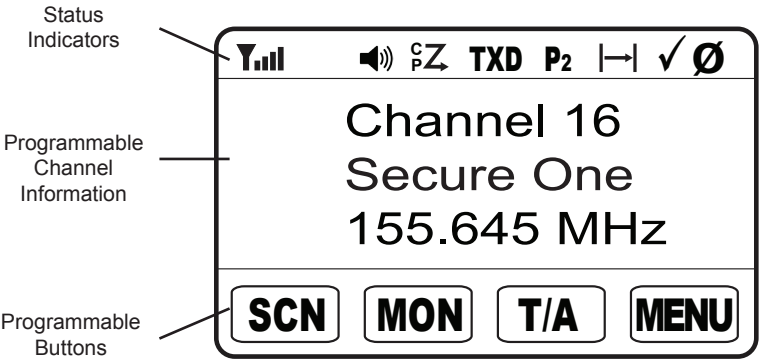
LCD Display Options

KNG mobile radios are equipped with a programmable touch sensitive display.

The top line displays radio activity such as transmit and receive indications, repeater talk-around selection, etc.

The middle section shows programmed information for the selected channel.

The bottom line of the display is populated with programmable buttons. Button functions are assigned using the PC radio editor. Buttons are toggled off or on by pressing the displayed icon.



Status Indicators	
	Receiver Signal Strength
RXD, RXA	Receive Digital, Receive Analog, Hold Time Active
TXD, TXA	Transmit Digital, Transmit Analog
H	High Transmit Power
L	Low Transmit Power
P1, P2	Priority 1 Channel, Priority 2 Channel
Ø, O	Encrypted, Clear Flashing when Tx is encrypted or when Rx incoming signal is encrypted.

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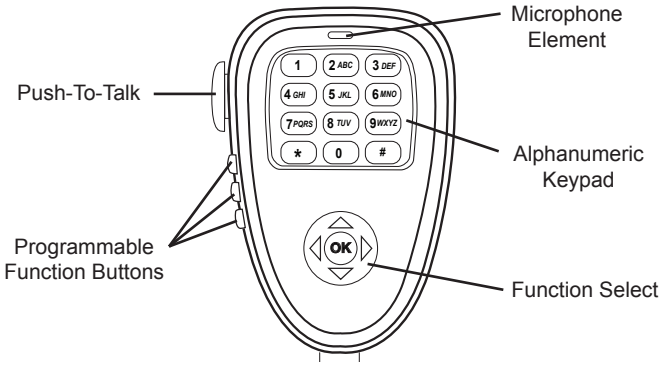
Status Indicators	
✓	Scanned Channel
CZ	Channel Scan On
ZZ	Zone Scan On
PZ	Priority Scan On
	Repeater Talkaround enabled
	Monitor Mode Flashing indicates Normal Mode in digital operation
	Open Audio

Alphanumeric Label Options	
NOTE: Three channel information lines are programmable with PC Radio Editor.	
Channel Number	Channel Number of Currently Selected Channel or Active Scanned Channel
Channel Label	Alphanumeric Label of Currently Selected Channel or Active Scanned Channel
Frequency	Operating Frequency of Currently Selected Channel or Active Scanned Channel
Received Unit ID	P25 ID of the radio transmitting the message currently being received If the received ID is programmed in your radio's Call List, the corresponding label will be displayed
Received Talk Group ID	P25 Talk Group ID of the radio transmitting the message currently being received
Zone Number	Number of Currently Selected Zone
Zone Label	Label of Currently Selected Zone
Zone and Channel	Currently Selected Zone and Channel Numbers

Microphone Controls

KAA0290 microphone include three programmable function buttons, an alphanumeric keypad and a function select switch.



Button/Menu Functions and Navigation

Function Selection

Most radio functions can be programmed as Touch Screen selections or as part of a menu list.

Touch Screen Selection

To toggle the functions assigned as Touch Screen buttons on and off, or access the associated menu, press the desired function on the LCD screen.

Button Options

NOTE: Active functions are indicated by a highlighted background. **SCN** = Active, SCN = Inactive.

Function	Label	Action
Backlight	LITE	Turns backlight on and off.
Channel Scan	SCAN	Turns channel scan on and off.
Channel Scan List	SCN+	Add or delete selected channel from the channel scan list
Cloning	CLONE	Transfer programmed radio information to another BK Radio via an optional cloning cable.

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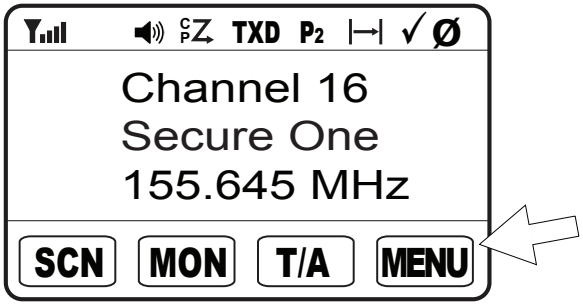
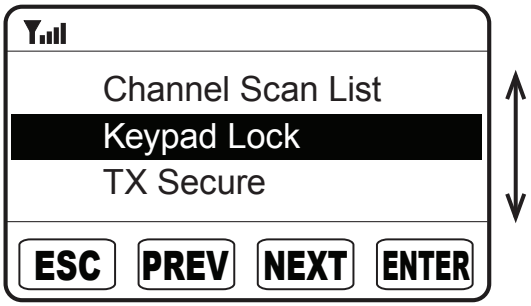
Function	Label	Action
Emergency		Assignable to the Orange button only.
Menu	MENU	Gateway to menu mode
Monitor	MON	Toggles between the monitor states. Press and hold will set the mode to open squelch.
Nuisance Channel Delete	DEL	Temporarily removes the active channel from the scan list.
Priority Channel Select	PRI	Open priority channel setup menu
Priority Scan	PSCN	Turns priority scan on and off.
Repeater Talkaround	T/A	Toggle between radio-to-radio and repeater operation. When enabled, the radio transmits on the programmed receive frequency.
Surveillance Mode	SURV	Turns surveillance mode on and off. Disables LED indicators and any tones/ beeps that would otherwise be emitted from the speaker.
Tx Digital	TXAD	Toggles between analog and digital Tx on mixed-mode channels
Tx Power	PWR	High/low power Tx select for switched power channels
Tx Secure	SEC	Tx encryption select for switched secure channels Channels programmed to always/never encrypt will not be affected.
Unit Call	UNIT	Opens the to unit-to-unit call mode
Zeroize Keys	ZERO	Erases all encryption keys from FIPSCOM
Zone Scan	ZSCN	Toggles zone scan option on and off. This setting is only used when channel scan is turned on.
Zone Scan List	ZSC+	Add/remove current zone from the zone scan list.
Zone Select	ZONE	Gateway to zone select menu. Allows user to select a different zone.

Menu Screen Selection

By programming a button as “Menu” a list of additional functions are accessed by pressing the button.

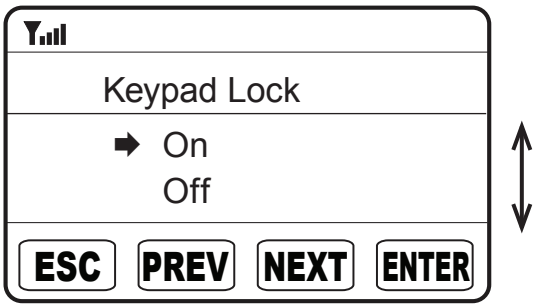


Use the PREV/NEXT buttons to highlight the desired function. Press “ENTER” to select the function.



When selected, a menu for the function will show in the display.

Use PREV/NEXT buttons to highlight the desired operation and press the “ENTER” button.



For functions with multiple selections, use the PREV/NEXT buttons to choice the desired operation. Press “ENTER” to set the selection or “ESC” to return to the previous menu without saving the setting.

Press and hold the “ESC” button to return to normal operation.

Menu Options		
The following items may be programmed as menu items.		
Backlight	Channel Scan	Channel Scan List
Keypad Lock	Monitor Mode	Priority Channels
Priority Scan	Talkaround	Surveillance
TX Digital	TX Power	TX Secure
Unit Call	Zone Scan	Zone Scan List
Zone Select		

Service

For radio service contact your RELM/BK Radio dealer. If you find it impractical to have service performed by your dealer contact the RELM Service Department at the address below:

RELM Service Department

7100 Technology Drive
West Melbourne, FL 32904
Phone: (800) 422-6281
E-mail: service@relm.com

RELM Wireless Corporation
7100 Technology Drive
West Melbourne, FL 32904
(800) 648-0947
www.relm.com

KNG Mobile Functions and Navigation
Preliminary Release