

How to Use Your Cobra 29 LX MAX

Features	1
The CB Story	A1
FCC Regulations, FCC Warnings & Included Accessories	
Controls & Indicators	A2
Our Thanks to You	A3
Customer Support	
Installation	
Location & Mounting/Connection	2
Antennas	
CB Antenna & Marine Installation	6-7
Ignition Noise Interference	7
Operating Your 29 LX MAX	
Turning On Your CB	8
Setting Channel Selector	9
Calibrate For SWR (Standing Wave Ratio)	10
To Receive	12
Selecting a Channel & 5-Meter	13
To Transmit	14
Setting Dynamike®	15
Setting Talkback	15
Menu Mode	16
Setting the Clock	17
Setting the Alarm	17
Setting the Count Down Timer	18
Key Tones Mode	18
Radio Check Mode	19
Setting Display Color Mode	20
Setting Brightness Mode	21
Turn NightWatch Illumination On/Off	21
Setting Contrast Mode	22
Bluetooth® Pairing	22-23
iRadAR Smartphone App	24-27
Downloading the App	24
Pairing the Radio to Use with iRadAR	24
AURA® Location Based Alerts	25
iRadAR® Community, Using Report Button, Radar Threat Alerts	27
Rewind-Say-Again®	28
Playback Last Transmission	28
Record 10 Second Memo	28
Weather Information	29
Weather Channels	29
Weather Alert Mode	30
Setting Weather Alert Scan and Auto Scan	30
Software Version/Factory Settings	31
NB-ANL/Off (Noise Blanker/Automatic Noise Limiter Switch)	32
Setting Delta Tune & RF Gain Control	32
Program Memory Channels	33
Scan/Memory Scan, Scan Memory Channels & CB Channels	34
Dimmer Control	34
Setting Squelch	35
S/RF Meter	36
External Speaker, Push-To-Talk & Mic Jack	37
Home And Office Set-Up	38
Temporary Mobile Set-Up	39
How Your CB Can Serve You	40
A Few Rules You Should Know	40
Channel 9 Emergency Messages	41
CB 10 Codes	42
Frequency Ranges	44
29 LX MAX Specifications	45
Warranty Information	46
FCC Statement	48-49
Optional Accessories	50
If You Need Service/Trademark Info	Back Cover

Features of This Product

- Selectable 4-Color LCD Display
- Advanced Bluetooth® Connectivity
- Rewind-Say-Again®
- Memo Record
- iRadAR App Integration
- Report Feature
- NightWatch® Illumination
- 10 Weather Channels
- Weather Scan
- Emergency Weather Alert
- 40 CB Radio Channels
- 40 Channel Scan
- Memory Channels
- Channel Frequency Read-Out
- Radio Check Diagnostic
- Clock/Timer/Alarm
- Multi-Function Heavy-Duty Electret Microphone with Phone, Rewind-Say-Again® & Report Functions
- Full 4 Watts AM RF Power Output
- SWR Calibration Meter
- Instant Channel 19 and 9
- Front Panel 6-Pin Microphone Connector
- Switchable Automatic Noise Limiter & Noise Blanker
- Adjustable Dynamike Boost
- Tactile Controls
- 9 Ft Mic Cord
- Programmable Dimmer Control
- RF Gain
- External Push-To-Talk Jack
- External Microphone Jack

Bluetooth® Features

- Dual Point Bluetooth®
- Caller I.D.
- A2DP Audio Streaming
- Phone Directory

Location

Plan a location of the transceiver and microphone bracket before starting the installation.

Select a location that is convenient for operation, yet does not interfere with the driver or the passenger.

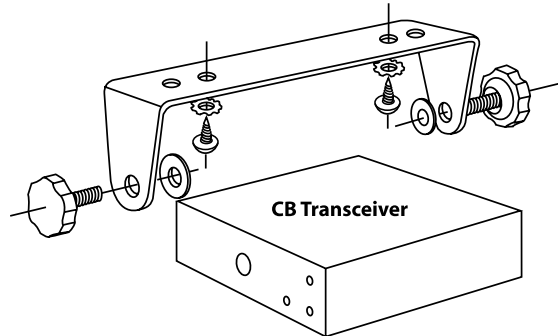
The transceiver is usually mounted to the underside of the dash with the microphone bracket beside it.

Mounting and Connection

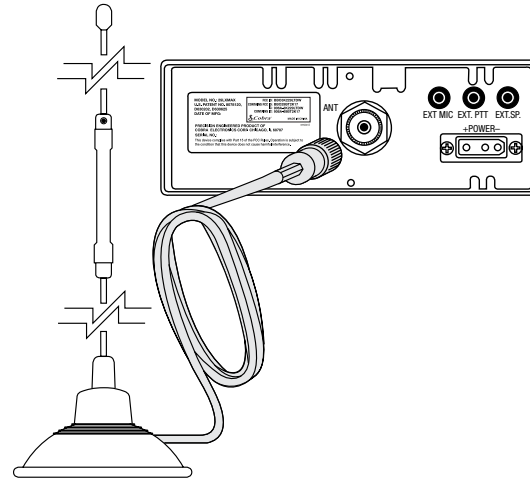
Note

The transceiver is held in the universal mounting bracket by two thumbscrews which allow for adjustment at a convenient angle.

The bracket includes two self-tapping screws and star washers. The mounting must be mechanically strong and conveniently located.



- 2 Drill the pilot and secure the bracket.



- 3 Connect the antenna cable plug to the receptacle marked "ANT" on the back of the unit.

continued

Installation

Note
Before installing the CB radio, visually check the vehicle's battery connection to determine which terminal is positive or negative. A negatively grounded vehicle has its negative lead grounded to the chassis.

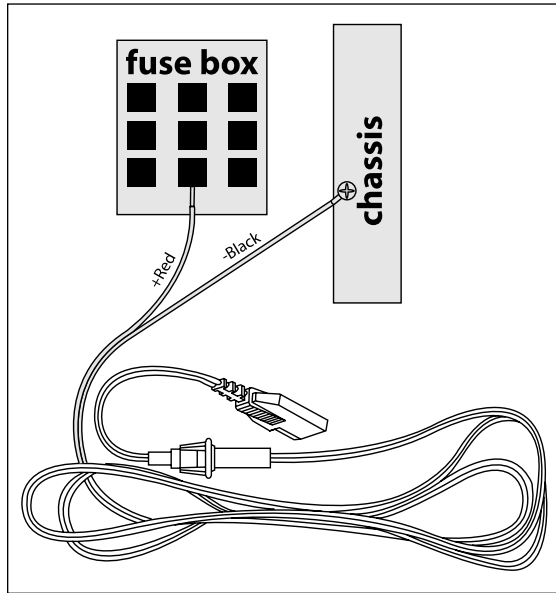
Note
Connecting to an accessory fuse prevents the unit from being left on accidentally, operating the unit without running the engine when the ignition is set to the accessory position.

Note
The CB must be connected to constant 12V power to use the clock and alarm functions.

Note
When connected to an accessory fuse, unit will self test the emergency weather alert automatically when ignition is turned on. As a result, the CB radio will briefly turn itself on and then off again.

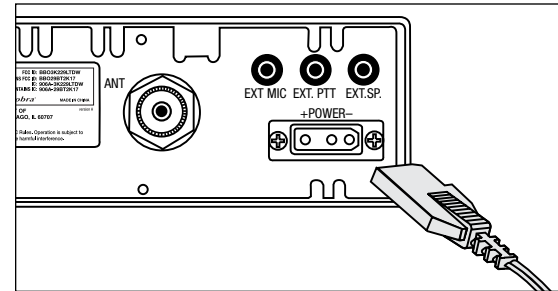
Note
The Clock/Timer feature needs to be reset when connected to a switched accessory fuse.

Note
The radio should be connected to a constant 12V source to maintain the time when the radio is turned off. This should also be considered if using the radio's alarm clock function.



- 4 Connect the red lead of the DC power cord to an accessory 12 volt fuse or directly to the battery.

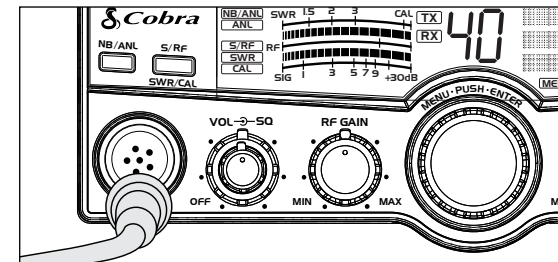
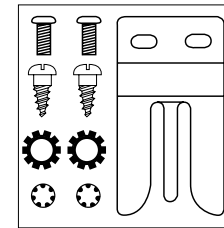
- 5 Connect the black lead to the negative side of the vehicle electrical system. This is usually the chassis. Any convenient location with a good electrical contact (remove paint) may be used.



- 6 Plug the power cable into the back of the unit marked "Power". Be sure to observe polarity markings.

- 7 Mount the microphone bracket on either side of the unit using the two screws supplied.

The bracket should be placed under the dash so the microphone is readily accessible.



- 8 Attach the microphone cable to the receptacle on the front of the unit and install the unit in the bracket securely.

Installation

Note
If the microphone is not connected, audio will not be heard at the speaker.

Antennas

Note

For optimum performance in passenger cars the ideal antenna location is on the center of the roof. Second choice is on the center of the trunk.

Note

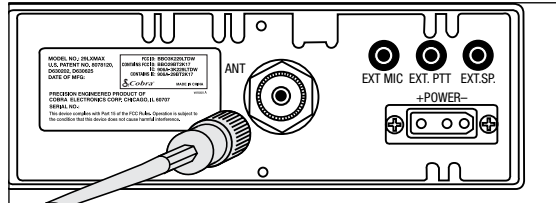
Because many newer trucks feature fiberglass door skins, the outside mirror must be grounded to the chassis via a ground strap, if the antenna is mounted on the mirror bracket.

Note

3-way Combination Antennas are also available which allow operation of all three bands (AM-FM & CB), using a single antenna. However, this type of antenna usually results in less than normal transmit and receive range when compared to a standard-type "Single Band" CB antenna. Call 773-889-3087 for further information.

CB Antenna

Since the maximum allowable power output of the transmitter is limited by the FCC, the antenna is critical in affecting the transmission distance. Only a properly matched antenna system will allow maximum power output. Loaded type antenna models are highly recommended for most installations. **The 29 LX MAX includes a weather mode (WX), a Dual Band (Center Load/Base Load) antenna is recommended.** Consult your Cobra dealer for further details, or call 773.889.3087 and speak to a Cobra representative.



- 1 A standard antenna connector is provided on the transceiver for easy connection.

Ignition Noise Interference

Use of a mobile receiver at low signal levels is normally limited by the presence of electrical noise. The primary source of noise in automobiles is from the alternator and ignition system. Typically, when the signal level is adequate, the background noise does not present a serious problem. Also, when extremely low level signals are being received, the transceiver may be operated with the vehicle's engine turned off. The unit requires very little current and therefore will not significantly discharge the vehicle's battery.

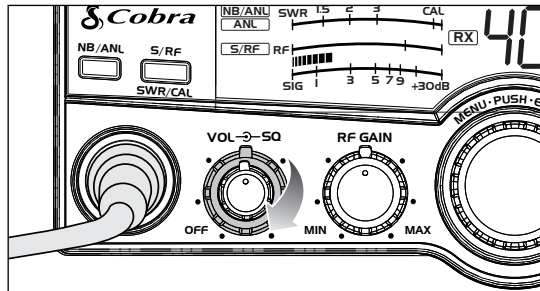
Even though the Cobra 29 LX MAX has an automatic noise limiter, in some installations ignition interference may be high enough to make good communications challenging. Many possibilities exist and variations between vehicles require different solutions. Consult with your Cobra dealer or radio technician for help in locating the source of severe noise.

Marine Installation

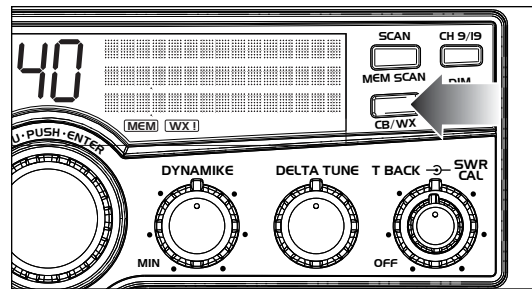
The transceiver will not operate at maximum efficiency in a boat without a ground plane, (unless it has a steel hull). Before attempting installation, consult your dealer for information regarding an adequate grounding system and prevention of electrolysis between fittings in the hull and water.

Turning On the Radio

Make sure the power cord, antenna and microphone are connected to their proper connectors before starting.

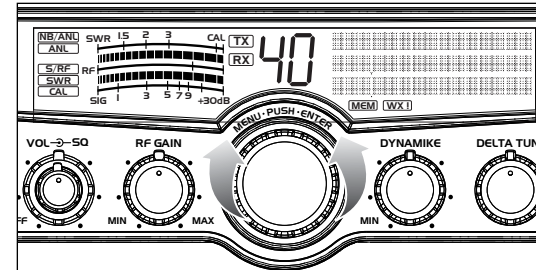


- 1 Rotate the **On/Off Volume** knob *clockwise* to turn the unit on and adjust to a normal listening level.



- 2 Press the **CB/WX** button to change between CB and weather modes.

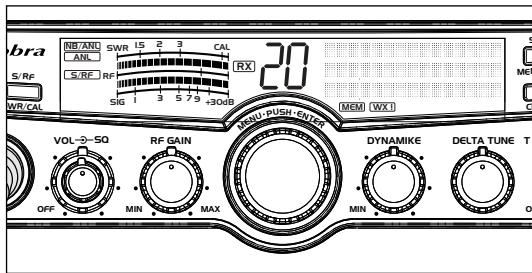
Setting Channel Selector



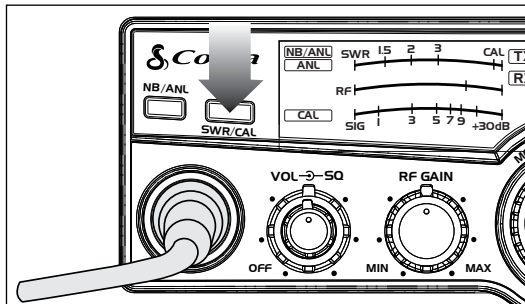
- 3 Select one of forty channels. The selected channel (1 through 40) will be indicated by the readout directly above the channel selector knob

Calibrate for SWR (Standing Wave Ratio)

SWR calibration is done to properly adjust the length of the antenna and to monitor the quality of the coaxial cable and all RF connections. This calibration is critical in order to achieve optimum performance.

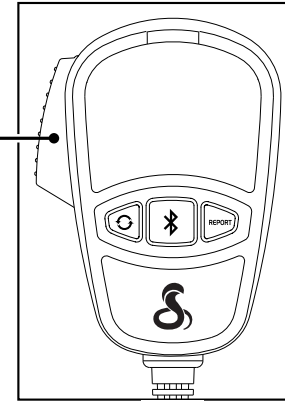


1 Set the radio to channel 20.

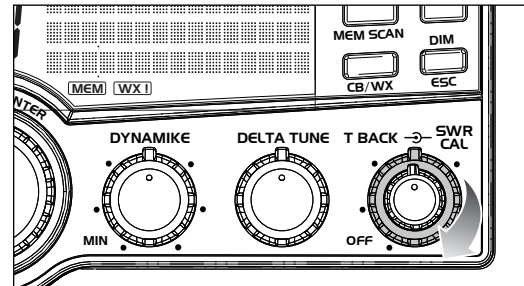


2 Press **S/RF-SWR/CAL** button to select **CAL**.

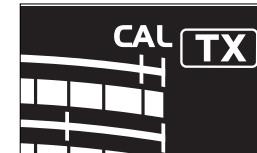
PUSH & HOLD



3 Push and hold the Push-to-Talk (**PTT**) button.



4 While holding the **PTT** adjust the **SWR CAL** knob so the meter swings to the **CAL** mark on the right side of the meter.



Note

Calibration must be made in an open area (never in a garage). The vehicle's doors must be closed. No one should be standing near the antenna. (See your antenna directions for more complete information).

Note

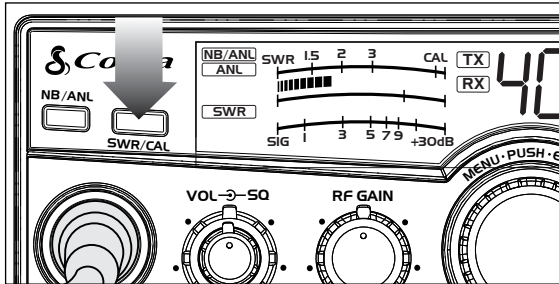
The reading will be slightly higher on Channels 1 and 40 compared to Channel 20.

continued

Note

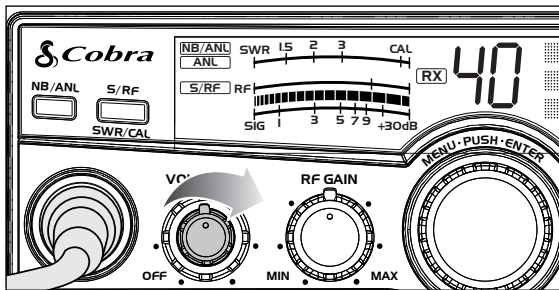
When switched to SWR mode the meter reading should ideally be as far to the left as possible. Anything over 3 is not acceptable. A slight antenna height adjustment (higher or lower) may be required. Repeat recalibration steps.

Calibrate for SWR *continued*



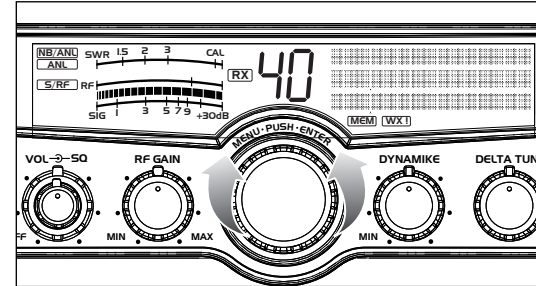
- 5 Release the Push-to-Talk (PTT) button and press and release the **S/RF-SWR/CAL** button to the SWR position. Then press the PTT button to read the SWR reading.
- 6 Repeat the same steps two through five on Channel 1 and 40. This will check SWR for all channels.

To Receive



- 1 Rotate the **On/Off Volume** knob *clockwise*. While receiving, the RX icon will be displayed and the lower portion of the meter will show the incoming signal strength.

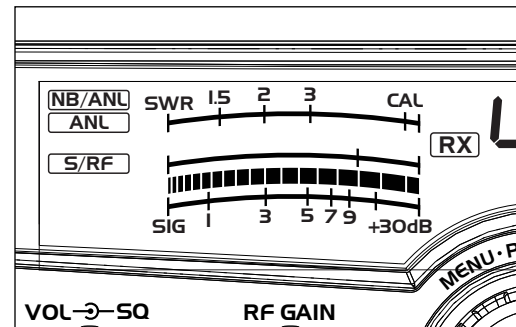
Selecting A Channel




- 1 Rotate the **Channel Selector** *clockwise* or *counter-clockwise* to select the desired channel.

S-Meter

The S-Meter swings proportionately to the strength of the incoming signal when receiving.

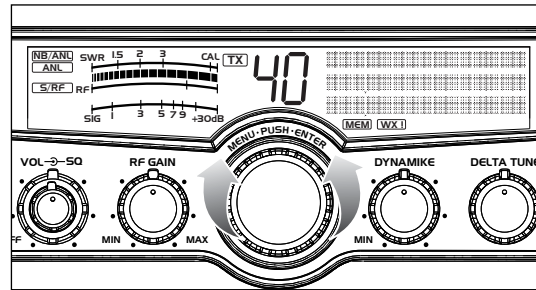


- 1 The **S/RF-SWR/CAL** button must be set in the S/RF setting to read the meter.

Caution!  Be sure the antenna is properly connected to the radio before transmitting. Transmitting without an antenna, or a poorly matched antenna, could cause damage to the transmitter.

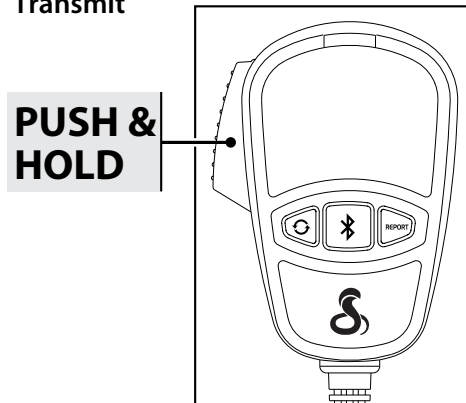
Be sure to read the F.C.C. Rules and Regulations included with this unit before transmitting.

To Transmit



- 1 Select a desired channel.

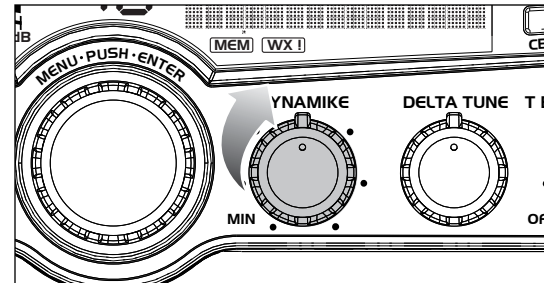
Transmit



- 2 Push and hold the **PTT** button to transmit. When transmitting, hold the microphone two inches from your mouth and speak in a clear, normal voice. Release **PTT** button to receive.

Setting Dynamike®

This controls the microphone sensitivity (outgoing audio level).

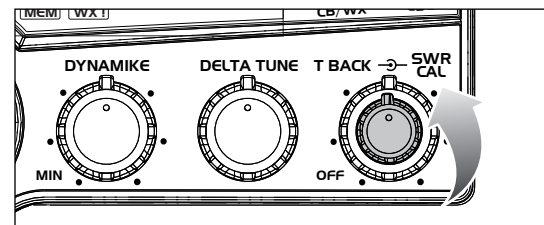


- 3 Initially, set **Dynamike** fully *clockwise* so that maximum voice volume is available. The Dynamike may have to be reduced in some conditions.

Setting TalkBack

This control is used to adjust the desired amount of modulation talk back present at the speaker during transmit.

At the fully *counter-clockwise* position the **TalkBack** is **Off**.



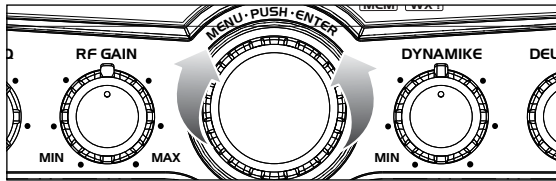
Operation

Note
Use **DIM/ESC** button to exit from any menu back to CB standby mode.

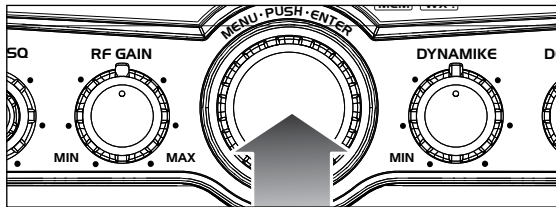
Menu Mode

Pressing the **Menu/Enter** knob is used to enter the menu and to select.

Rotating the **Menu/Enter** knob is used to move the cursor.

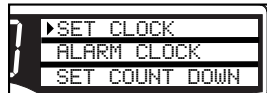


Rotate the **Menu/Enter** knob *clockwise* and *counter-clockwise* to navigate the menu levels.

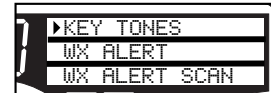


Press the **Menu/Enter** knob to select.

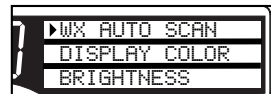
Level 1:



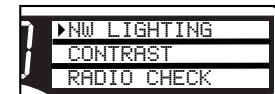
Level 2:



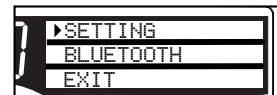
Level 3:



Level 4:



Level 5:



Operation

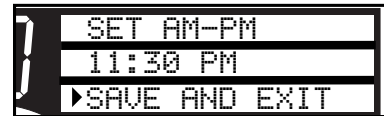
Setting the Clock

To set the clock, press the **Menu/Enter** knob and select **Set Clock**.



Press again to set the clock.

- Rotate the **Menu/Enter** knob to select the hour, minutes and AM/PM.
- Press the **Menu/Enter** knob to save each value.



Press the **Menu/Enter** knob to **SAVE** and **EXIT**.

Note

The clock will not appear on the display if the time has not yet been set.

Note

The radio should be connected to a constant 12V source to maintain the time when the radio is turned off.

Note

The clock will be displayed in the top right corner of the display

Setting the Alarm

Your 29 LX MAX can be utilized as an alarm clock.

To set the alarm, press the **Menu/Enter** knob and select **Alarm Clock**.



Press **SET ALARM TIME**.

- Rotate the **Menu/Enter** knob to select a value.
- Press the **Menu/Enter** knob to save.

Press the **Menu/Enter** knob to set **AM/PM**. Press **Menu/Enter** knob to **save** and proceed to set the **Set Snooze Length** or **EXIT**.

Operation

Note

Default snooze time length is 10 minutes.

Note

Use **DIM/ESC** button to exit from any menu back to CB standby mode.

Note

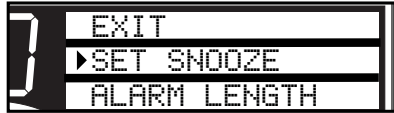
Default alarm length is 60 seconds and is set in 10 second increments.

Note

Once count down time is complete, there will be audio tones for 5 seconds.

Setting the Alarm *continued*

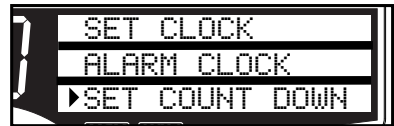
Once the alarm settings are complete, rotate the **Menu/Enter** knob *clockwise* to **Set Snooze** and press **Menu/Enter** to select.



Select the desired snooze time (from 1 to 60 minutes). Press **Enter** to save and exit, return to **Set Snooze** or **Alarm Length**. Select **Alarm Length** to set the alarm duration (from 10 to 300 seconds). Press the **Menu/Enter** knob save and exit.

Setting the Count Down Timer

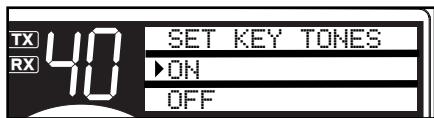
To set the count down timer, press **Menu/Enter** knob and select **Set Count Down**.



Follow the instructions in **Setting the Clock** section (page 17) to set the count down hour and minutes. Once the desired count down time is selected, press the **Menu/Enter** knob again to save and exit.

Key Tones Mode On and Off

Press the **Menu/Enter** knob and select **Key Tones**. Press the **Menu/Enter** to set Key Tones **On/Off**.



Rotate the **Menu/Enter** knob to select **On/Off** and press the **Menu/Enter** knob to exit to main menu.

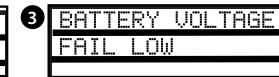
Operation

Radio Check Mode

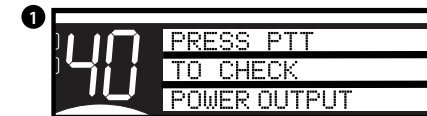
Allows testing of important radio functions. Press **Menu/Enter** knob and select **RADIO CHECK**.

Press **Menu/Enter** to select **1st test**, **2nd test** and **3rd test**.

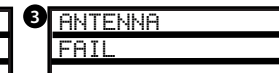
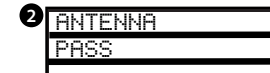
Test 1- Battery Level: Confirms that battery voltage level is between 10.8 V to 15.8 V. If in that range, it is **PASS**. Outside of that range, either **FAIL LOW** or **FAIL HIGH** will be displayed. Press **Menu/Enter** knob to advance to next test.



Test 2- RF Power Output: Confirms a 3.3 to 4 Watt output level. Once the **PTT** button is pressed, Pass or Fail will be displayed if the level is outside the limits.



Test 3- Antenna Mismatch Warning: Press the **PTT** button to check for proper matching.



Note

Use **DIM/ESC** button to exit and return to CB standby mode. If 10 seconds pass or if Enter button pressed, unit goes to 2nd test.

Note

Press **PTT** within 10 seconds or unit will go to the next test.

Note

Use **DIM/ESC** button to exit and return to CB standby mode. If 10 seconds pass or if Enter button pressed, go to 3rd test.

Note

If 10 seconds pass or if **Menu/Enter** knob is pressed, testing is complete. Unit will return to CB Standby mode.