COMMERCIAL DIGITAL TWO-WAY RADIO

MOTOTRBO™ SL300 PORTABLE RADIOS QUICK REFERENCE GUIDE

Important Safety Information

RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios

ATTENTION!

This radio is restricted to Occupational use only. Before using the radio, read the RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios which contains important operating instructions for safe usage and RF energy awareness and control for Compliance with applicable standards and Regulations.

For a list of Motorola-approved antennas, batteries, and other accessories, visit the following website:

http://www.motorolasolutions.com/

English

RF Energy Exposure Awareness and Control Information and Operational Instructions for Occupational Use

NOTICE: This radio is intended for use in occupational/controlled conditions where users have full knowledge of their exposure and can exercise control over their exposure to meet the occupational limits in FCC and International standards. This radio device is NOT authorized for general population consumer use.

This two-way radio uses electromagnetic energy in the radio frequency (RF) spectrum to provide communications between two or more users over a distance. It uses radio frequency (RF) energy or radio waves to send and receive calls. RF energy is one form of electromagnetic energy. Other forms include, but are not limited to, sunlight and x-rays. RF energy, however, should not be confused with these other forms of electromagnetic energy, which when used improperly, can cause biological damage. Very high levels of x-rays, for example, can damage tissues and genetic material.

Experts in science, engineering, medicine, health, and industry work with organizations to develop standards for safe exposure to RF energy. These standards provide recommended levels of RF exposure for both workers and the general public. These recommended RF exposure levels include substantial margins of protection.

All Motorola two-way radios are designed, manufactured, and tested to ensure they meet government-established RF exposure levels. In addition, manufacturers also recommend specific operating instructions to users of two-way radios. These instructions are important because they inform users about RF energy exposure and provide simple procedures on how to control it.

Please refer to the following websites for more information on what RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits:

http://www.fcc.gov/oet/rfsafety/rf-faqs.html
www.who.int/en/
www.motorolasolutions.com/rfhealth

Federal Communication Commission (FCC) Regulations

When two-way radios are used as a consequence of employment, the FCC requires users to be fully aware of and able to control their exposure to meet occupational requirements. Exposure awareness can be facilitated by the use of a product label directing users to specific user awareness information. Your Motorola two-way radio has a RF Exposure Product Label. Also, your Motorola user manual, or separate safety booklet includes information and operating instructions required to control your RF exposure and to satisfy compliance requirements.

Compliance with RF Exposure Standards

Your Motorola two-way radio is designed and tested to comply with a number of national and International standards and guidelines (listed below) for human exposure to radio frequency electromagnetic energy. **This radio complies with the IEEE (FCC) and ICNIRP exposure limits for occupational/ controlled RF exposure environments at operating duty factors of up to 50% talk-50% listen and is approved for occupational use only.** In terms of measuring RF energy for compliance with these exposure guidelines, **your radio generates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.**

NOTE: The approved batteries, supplied with this radio, are rated for a 5-5-90 duty factor (5% talk-5% listen-90% standby) even though this radio complies with FCC occupational exposure limits and may operate at duty factors of up to 50% talk.

Your Motorola two-way radio complies with the following RF energy exposure standards and guidelines:

- United States Federal Communications Commission (FCC), Code of Federal Regulations; 47 CFR et seq. & FCC, OET Bulletin 65
- Institute of Electrical and Electronic Engineers (IEEE) C95.1
- International Commission on Non-Ionizing Radiation Protection (ICNIRP)

- Ministry of Health (Canada) Safety Code 6 & Industry Canada RSS-102
- Australian Communications Authority Radiocommunications Standard et seq.
- ANATEL ANNEX to Resolution No. 303 et seq.

RF Exposure Compliance and Control Guidelines and Operating Instructions for Two-Way Radio Operations

To control your exposure and ensure compliance with the occupational/controlled environment exposure limits, always adhere to the following procedures.

- DO NOT remove the RF Exposure Label from the device.
- User awareness instructions should accompany device when transferred to other users.

Two-Way Radio Operation

- Transmit no more than the rated duty factor of 50% of the time. To transmit (talk), push the Push-To-Talk (PTT) button. To receive calls, release the PTT button. The PTT button may reside on the radio itself or may be hosted on approved wired or wireless (for example, a Bluetooth-enabled remote PTT button) accessories. Transmitting 50% of the time, or less, is important because this radio generates measurable RF energy exposure only when transmitting (in terms of measuring for standards compliance).

- In front of the face. Hold the radio in a vertical position with the microphone (and other parts of the radio including the antenna) at least one inch (2.5 centimeters) away from the nose or lips. Keeping the radio at a proper distance is important to ensure compliance.

NOTE: RF exposures decrease with increasing distance from the antenna.

- Body Worn Operation. When worn on the body, always place the radio in a Motorola-approved clip, holder, holster, case, or body harness for this product. Using approved body-worn accessories is important because the use of non-Motorola-approved accessories may result in exposure levels, which exceed the occupational/controlled environment RF exposure limits.
- Use only Motorola-approved supplied or replacement antennas, batteries, and audio accessories. Use of non-Motorola-approved antennas, batteries, and wired or wireless accessories may exceed the applicable RF exposure guidelines (iEEE, ICNIRP or FCC).
- For a list of Motorola-approved accessories for your radio model, visit the following website: https://www.motorolasolutions.com

Electromagnetic Interference/ Compatibility

NOTE: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility.

Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your radio in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Aircraft

When instructed to do so, turn off your radio when on board an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.

Medical Devices

Pacemakers

The Advanced Medical Technology Association (AdvaMed) recommends that a minimum separation of 6 inches (15 centimeters) be maintained between a handheld wireless radio and a pacemaker. These recommendations are consistent with those of the U.S. Food and Drug Administration.

Persons with pacemakers should:

- ALWAYS keep the radio more than 6 inches (15 centimeters) from their pacemaker when the radio is turned ON.
- Not carry the radio in the breast pocket.
- Use the ear opposite the pacemaker to minimize the potential for interference.
- Turn the radio OFF immediately if there is any reason to suspect that interference is taking place.

Hearing Aids

Some digital wireless radios may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

Use of Communication Devices While Driving

Always check the laws and regulations on the use of radios in the areas where you drive.

- Give full attention to driving and to the road.
- Use hands-free operation, if available.
- Pull off the road and park before making or answering a call, if driving conditions or regulations so require.

Acoustic Safety

Exposure to loud noises from any source for extended periods of time may temporarily or permanently affect your hearing. The louder the radio's volume, the less time is required before your hearing could be affected. Hearing damage from loud noise is sometimes undetectable at first and can have a cumulative effect.

To protect your hearing:

- Use the lowest volume necessary to do your job.
- Turn up the volume only if you are in noisy surroundings.
- Turn down the volume before adding headset or earpiece.
- Limit the amount of time you use headsets or earpieces at high volume.
- When using the radio without a headset or earpiece, do not place the radio's speaker directly against your ear.

Operational Warnings

For Vehicle With Air Bags:

Refer to vehicle manufacturer's manual prior to installation of electronic equipment to avoid interference with air bag wiring.

DO NOT place a portable radio in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmospheres

(Explosive atmospheres refers to hazard classified locations that may contain hazardous gas, vapors, or dusts.)

Turn off your radio prior to entering any area with a potentially explosive atmosphere unless it is a portable radio type especially qualified for use in such areas as Intrinsically Safe (for example, Factory Mutual, CSA, UL, or CENELEC).

Operational Warnings (Continued)

DO NOT remove, install, or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

The areas with potentially explosive atmospheres referred to above include fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, and areas where the air contains chemicals or particles such as grain, dust or metal powders. Areas with potentially explosive atmospheres are often, but not always, posted.

Blasting Caps and Blasting Areas

To avoid possible interference with blasting operations, turn off your radio when you are near electrical blasting caps, in a blasting area, or in areas posted: “Turn off two-way radio.” Obey all signs and instructions.

Operational Cautions

Caution

Antennas

DO NOT use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.

Batteries

All batteries can cause property damage and/or bodily injury, such as burns, if a conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

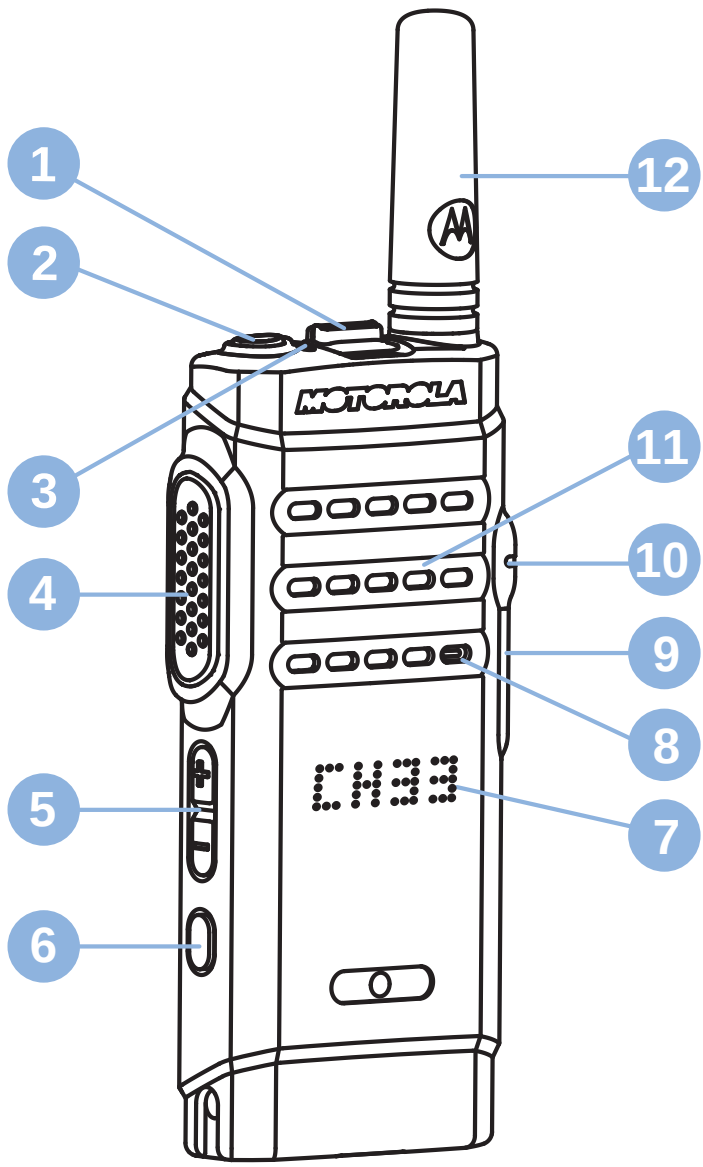
MOTOROLA

SL300 Portable Radios
Quick Reference Guide

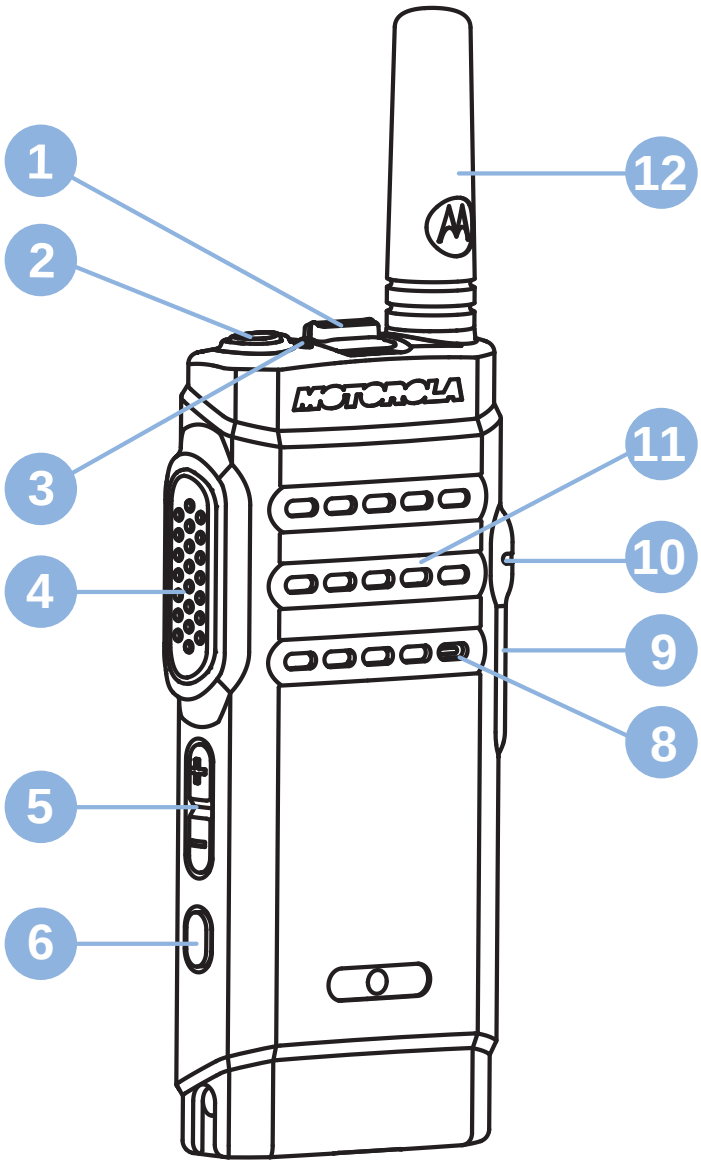
NOTE: For more details on your radio's operations/ features, refer to MOTOTRBO SL Series SL300 Display/Non-Display Portables User Guide (MN000895A01/MN000897A01)

Radio Controls

Display Radio



Non-Display Radio



Record your radio's programmable button functions in the blanks provided. **SP** represents short press, **LP** represents long press.

1. Display Radio: Channel Rocker
   Non-Display Radio: Channel Selector Switch
2. On/Off/Information Button
3. LED Indicator
4. Push-to-Talk (**PTT**) Button
5. Volume Button
6. Side Button 1 (Programmable)
   SP: _____ **LP**: _____
7. Display
8. Microphone
9. USB Connector
10. Accessory Connector
11. Speaker
12. Antenna

LED Indicator

Solid red – Radio is charging.

Blinking red – Radio is (1) transmitting at low battery condition, (2) receiving an emergency transmission, (3) indicating low battery charge when the **On/Off/ Information** button is pressed, (4) has failed the self-test upon powering up, (5) has charging errors, or (6) has moved out of range if radio is configured with Auto-Range Transponder System.

Solid yellow – Radio is (1) monitoring a conventional channel, or (2) indicating fair battery charge when the **On/Off/Information** button is pressed.

Blinking yellow – Radio is (1) scanning for activity, (2) receiving a Call Alert, or (3) the flexible receive list is enabled.

Solid green – Radio is (1) powering up, (2) sending a Call Alert or an emergency transmission, (3) transmitting, or (4) indicating full battery charge when the **On/Off/Information** button is pressed.

Blinking green – Radio is (1) receiving a call or data, or (2) detecting activity over the air.

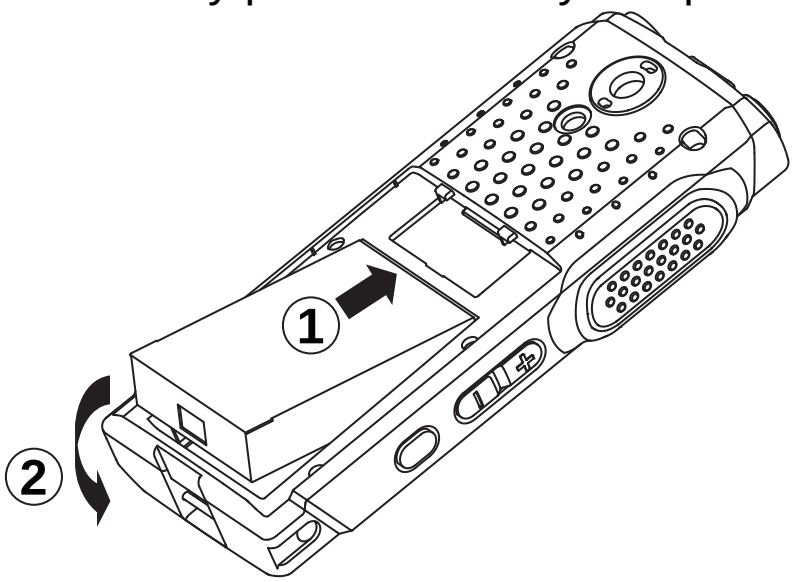
Charging the Battery

Your radio is powered by a Lithium-Ion (Li-Ion) battery. To avoid damage and to ensure compliance with warranty terms, charge the battery using a Motorola charger exactly as described in the charger user guide. All chargers can charge only Motorola authorized batteries. Other batteries may not charge. It is recommended your radio remains powered off while charging.

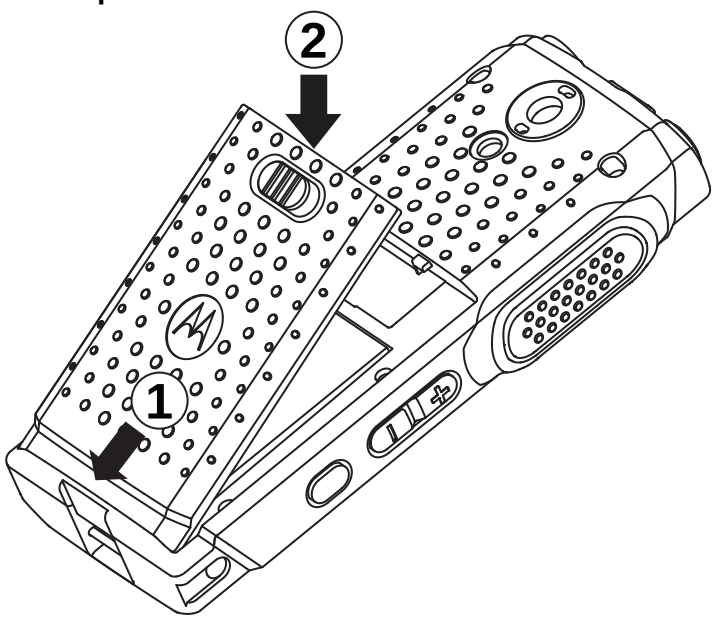
Charge a new battery 14 to 16 hours before initial use for best performance. Prior to charging a battery with the radio, it is recommended to turn the radio off. Batteries charge best at room temperature.

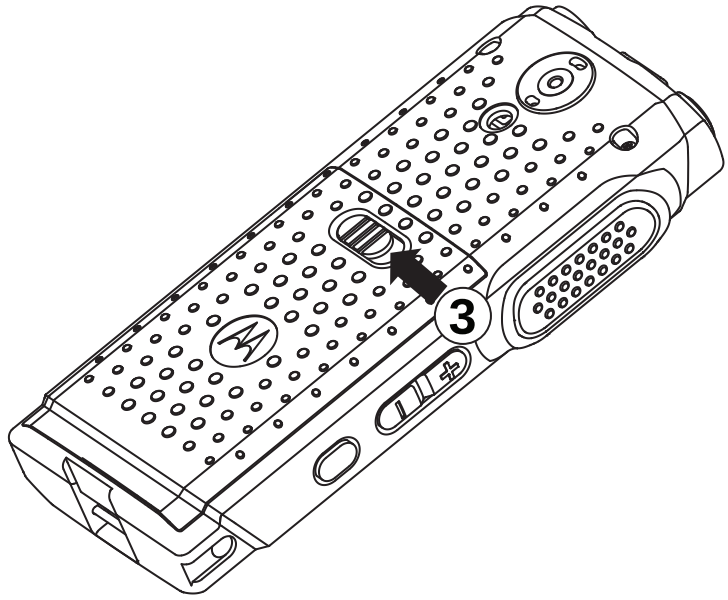
Attaching the Battery

Align the battery contacts with the contacts inside the battery compartment. Insert the contact side of the battery first. Gently push the battery into place.



To attach battery cover, align it in place and slide the battery latch until it snaps into place. Slide battery latch into lock position.

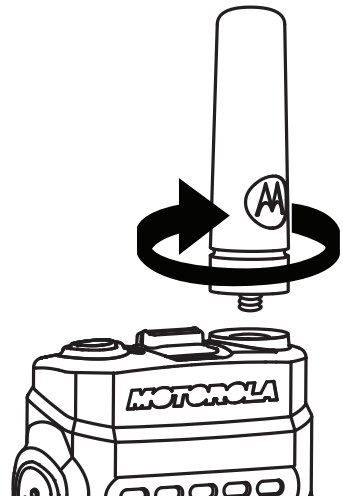




Attaching the Antenna

With the radio turned off, set the antenna in its receptacle and turn clockwise.

Make sure that the antenna is tightened securely to the radio.



To remove the antenna, turn the antenna counterclockwise.

Powering Up and Turning Off the Radio

Short press the **On/Off/Information** button.
You see a power on animation for display radio. The LED lights up solid green.

*To turn off the radio, long press the **On/Off/ Information** button.*

Adjusting the Volume

To increase the volume, press the **Volume** button up.

*To decrease the volume, press the **Volume** button down.*

NOTE: Your radio can be programmed to have a minimum volume offset where the volume level cannot be turned down fully. Check with your dealer or system administrator for more information.

Accessing the Radio from Password

Follow the procedure below.

1. Power up the radio. You hear a continuous tone.
2. Push the **Channel Rocker** to enter the first digit of the password.

3. Press **Side Button 1** to enter each digit of the remaining three digits of the password. You hear a positive indicator tone for each **Side Button 1** press. When the second digit of the password is entered, your radio ignores any push of the **Channel Rocker**.

4. When the last digit of the four-digit password is entered, your radio automatically checks the validity of the password. If the password is correct, your radio proceeds to power up.
   OR
   If the password is incorrect, you hear a continuous tone. Repeat Steps 1 to 3.

Selecting a Channel

Push the **Channel Rocker** for display radio or **Channel Selector Switch** for non-display radio to select the channel.

Making a Group Call

Follow the procedure below.

1. Select the channel.
   OR
   Press the programmed **One Touch Access** button.

2. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.

3. Press the **PTT** button to make the call. The LED lights up solid green. The display shows the group call alias or ID for display radio.

4. Wait for the Talk Permit Tone to finish (if enabled).

5. Speak clearly into the microphone.

6. Release the **PTT** button to listen. When the target radio responds, the LED blinks green. You see the transmitting radio alias or ID on your display for display radio.

7. If the Channel Free Indication feature  is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond.
   OR
   If there is no voice activity for a predetermined period of time, the call ends. Radio returns to the screen you were on prior to initiating the call.

To make a call to a group of users, your radio must be configured as part of that group.

Making a Private Call

NOTE: Your radio must be programmed for you to initiate a Private Call.

Follow the procedure below.

1. Select the channel with the active subscriber alias or ID.
   OR
   Press the programmed **One Touch Access** button.
2. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
3. Press the PTT button to make the call. The LED lights up solid green. The display shows the subscriber alias or ID for display radio.
4. Wait for the Talk Permit Tone to finish (if enabled).
5. Speak clearly into the microphone.
6. Release the **PTT** button to listen. When the target radio responds, the LED blinks green.
7. If the Channel Free Indication feature is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond.
   OR
   If there is no voice activity for a predetermined period of time, the call ends. You hear a short tone.

Making a Selective Call

NOTE: Your radio must be programmed for you to initiate a Selective Call.

Follow the procedure below.

1. Select the channel with the active subscriber alias or ID.
2. Hold the radio vertically 1 to 2 inches (2.5 to 5.0 cm) from your mouth.
3. Press the PTT button to make the call. The LED lights up solid green.
4. Wait for the Talk Permit Tone to finish (if enabled).
5. Speak clearly into the microphone.
6. Release the **PTT** button to listen. When the target radio responds, the LED blinks green.
7. If the Channel Free Indication feature  is enabled, you hear a short alert tone the moment the transmitting radio releases the **PTT** button, indicating the channel is free for you to respond. Press the **PTT** button to respond.
   OR
   If there is no voice activity for a predetermined period of time, the call ends.

Starting and Stopping Scan

Press the programmed **Scan** button.
OR
Use the **Channel Rocker** for display radio or **Channel Selector Switch** for non-display radio to select a channel programmed with Auto Scan enabled.

When Scan is enabled, the LED blinks yellow and you hear a positive indicator tone.

When Scan is disabled, the LED turns off and you hear a negative indicator tone.

*To stop a scan, press the programmed **Scan** button.*

Making a Call Alert

Press the programmed **One Touch Access** button to make a Call Alert to the predefined alias or ID. The display shows ALERT for display radio. The LED lights up solid green when your radio is sending the Call Alert.

If the Call Alert acknowledgement is received, a tone sounds and the display shows positive indicator for display radio.

If the Call Alert acknowledgement is not received, a tone sounds and the display shows negative indicator for display radio.

Sending an Emergency Alarm

Press the programmed **Emergency On** button. The display shows ALRM and the destination alias for display radio.

When an Emergency Alarm acknowledgement is received, the Emergency tone sounds and the LED blinks green.

If your radio does not receive an Emergency Alarm acknowledgement, and after all retries have been exhausted, a tone sounds.

Radio exits the Emergency Alarm mode.

Voice Announcement

Press the programmed **Voice Announcement** button to toggle voice announcement on or off.

NOTES

Motorola Solutions, Inc.
1303 East Algonquin Road
Schaumburg, Illinois 60196 U.S.A.

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