

TALKABOUT™ TWO-WAY RADIO

T802/T803 SERIES USER GUIDE



en-US

fr-CA

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Safety and Compliance Information



NOTE:

- Before using this radio, read this booklet which contains important operating instructions.
- For information on product details, brochures, user manuals, and approved accessories. Please refer to <https://www.motorolasolutions.com>.

Compliance with RF Exposure Standards

National and international regulations require manufacturers to comply with the RF energy exposure limits for portable two-way radios before they can be marketed. Your Motorola Solutions two-way radio is designed, manufactured, and tested to comply with all applicable national and international regulations for human exposure to radio frequency electromagnetic energy.

RF Energy Exposure Awareness and Control Information and Operational Instructions for General Population and Uncontrolled Environment Use

For more information on what RF energy exposure is, see the following websites:

- <https://www.fcc.gov/>
- <https://www.who.int/health-topics/electromagnetic-fields/>
- <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11467.html>
- <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01904.html>

For additional information, see https://www.motorolasolutions.com/en_us/about/company-overview/corporate-responsibility.html.

RF Exposure Compliance and Control Guidelines

- Do not remove any of the RF Exposure Labels if present from this device or its related accessories.
- Attach these instructions to the device when you transfer it to other users.
- Do not use this device if the operational requirements described herein are not met.

Operating Instructions

- Transmit no more than 50 % of the time. To transmit (talk), press the Push-To-Talk (PTT) button. To receive calls, release the **PTT** button.
- Hold the radio in a vertical position in front of the face with the microphone (and other parts of the radio including the antenna) at least 1 in. (2.5 cm) away from the nose or lips.
- Antenna should be kept away from the eye.
- When worn on the body, always place the radio in a Motorola Solutions-approved clip, holder, holster, case, or body harness for this product.
- Do **not** hold the antenna when the radio is transmitting.
- Do **not** use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with your skin, minor burn can result.
- To ensure continued compliance with applicable RF exposure limits, use only Motorola Solutions-approved, supplied or replacement antennas, batteries, and accessories.
- For a list of Motorola Solutions-approved accessories please refer to your user manual or visit <https://www.motorolasolutions.com>.

Acoustic Safety



CAUTION: Exposure to loud noises from any source for extended periods of time may temporarily or permanently affect your hearing. The louder the volume of the radio, the sooner your hearing will 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.

Medical Devices

 **CAUTION:** If you use a personal medical device, such as a pacemaker or hearing aid, 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.

Holsters Incorporating Magnets

Motorola Solutions holsters incorporate strong, neodymium magnets. If you use a personal medical device, such as a pacemaker or hearing aid, consult the manufacturer of your device to determine if it can be used in close proximity to magnets. Your physician may be able to assist you in obtaining this information. Also be aware that magnets can damage other products, including cell phones, computers, hard drives, and other electronic devices, as well as credit cards and magnetic media. Keep the holster away from any mechanical device that could be affected by a magnetic field. Consult the manufacturer of your product to determine if your device or product can be used in close proximity to magnets.

Operational Warnings

The following explains the operational warnings:

For Vehicle with Air Bags

-  **WARNING:**
- Refer to your vehicle manufacturer's manual before 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

-  **WARNING:**
- Do **not** carry a radio that is not certified for Hazardous Locations into a potentially explosive atmosphere. It could result in a serious injury or death. You should only use a radio certified for hazardous locations in potentially explosive atmospheres.
 - Explosive atmospheres refer to hazard classified locations that may contain hazardous gas, vapors, dusts, such as fueling areas below decks on boats, fuel or chemical transfer 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.
 - Do **not** remove, install, or charge batteries in such areas, or remove or install antennas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

Blasting Caps and Blasting Areas

-  **WARNING:** 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.

Batteries

-  **CAUTION:** Use only Motorola Solutions approved batteries.
- Risk of explosion if the battery is replaced by an incorrect type.
 - Charge your battery using the approved Motorola Solutions charger.
 - Use the battery in accordance with its water and/or dust Ingress Protection (IP) rating.
 - Do **not** discard your battery into a fire.
 - Do **not** replace the battery in any area labeled "Hazardous Atmosphere".
 - Do **not** disassemble, crush, puncture, shred, or otherwise attempt to change the form of your battery.
 - Do **not** dry a wet or damp battery with an appliance or heat source, such as a hair dryer or microwave oven.

- Do **not** allow conductive material such as jewelry, keys, or beaded chains to touch exposed battery terminals.
- Do **not** dispose of batteries with household waste.

Safety Instruction for Power Supply

1. The power supply is for use with equipment according to IEC/EN/UL 62368-1/60950-1.
2. The power supply is for indoor use in dry locations.
3. The equipment should be connected to a nearby and easily accessible socket outlet.
4. If the power supply is damaged or defective, do not repair or use the power supply.
5. For more details, please refer to https://www.motorolasolutions.com/en_xu/support/emea-compliance.html#phnav_other-products.

Do Not Substitute Options or Accessories

The Motorola Solutions communications equipment certified as intrinsically safe by the approving agency (UL, CSA, CENELEC) is tested as a complete system which consists of the listed agency Approved portable, Approved battery, and Approved accessories or options, or both. This Approved portable and battery combination must be strictly observed. There must be no substitution of items, even if the substitute has been previously Approved with a different Motorola Solutions communications equipment unit. Approved configurations are listed by the Approving Agency (UL, CSA, CENELEC).

The Hazardous Location-Approved Label affixed to radio refers to the intrinsically safe classification of that radio product, and the approved batteries that can be used with that system.

The manual part number referenced on the Hazardous Location-Approved Label identifies the approved Accessories and or options that can be used with that portable radio unit.

Using a non-Motorola Solutions-Hazardous Location-Approved battery and/or accessory with the Motorola Solutions approved radio unit will void the Hazardous Location approval of that radio unit.

European Union (EU) Waste of Electrical and Electronic Equipment (WEEE) Directive



The European Union's WEEE directive requires that products sold into EU countries must have the crossed out trash bin label on the product (or the package in some cases). As defined by the WEEE directive, this cross-out trash bin label means that customers and end-users in EU countries should not dispose of electronic and electrical equipment or accessories in household waste. Customers or end-users in EU countries should contact their local equipment supplier representative or service centre for information about the waste collection system in their country.

Class B Digital Device

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:



NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Notice to Users (FCC and Industry Canada)

This device complies with Part 15 of the FCC rules and Industry Canada's license-exempt RSS's per the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.
- Changes or modifications made to this device, not expressly approved by Motorola Solutions, could void the authority of the user to operate this equipment.

Supplier's Declaration of Conformity



Supplier's Declaration of Conformity Per FCC
CFR 47 Part 2 Section 2.1077(a)
Responsible Party
Name: Motorola Solutions, Inc.
Address: 2000 Progress Pkwy, Schaumburg, IL
60196.
Phone Number: 1-800-927-2744
Hereby declares that the product:
Model Name: T802 and T803
conforms to the following regulations:
FCC Part 15, subpart B, section 15.107(a),
15.107(d), and section 15.109(a).

Radio Overview

Figure 1: Radio Overview for T802 and T803

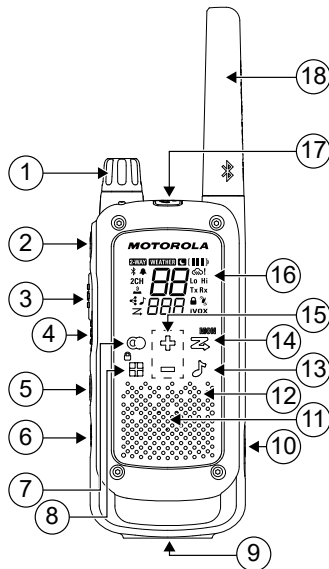


Table 1: Radio Overview Components

No.	Name	No.	Name
1	Power/Volume Knob	10	USB-C Charging Port
2	Flashlight Button	11	Speaker
3	Push-to-Talk (High)	12	Microphone
4	Push-to-Talk (Low)	13	Call Tone
5	Easy Pairing/Location Sharing Button	14	Scan/Monitor
6	Emergency Button	15	Scroll
7	Mode Button	16	Hidden Segmented LED Display
8	Menu/Lock	17	Accessory Port
9	Space for Personalization Stickers	18	Antenna

Radio Display

Figure 2: Radio Display for T802 and T803

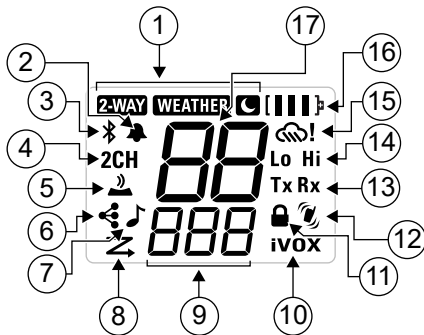


Table 2: Radio Display Components

No.	Name	No.	Name
1	Mode	10	iVOX [OFF, L1,L2, L3]; VOX [OFF, L1,L2, L3]
2	Roger Tone [On/Off]	11	Keypad Lock
3	Bluetooth [On/Off]	12	Vibracall [On/Off]
4	Dual Watch [On/Off]	13	Status (Transmit/ Receive)
5	Keypad Tone [On/Off]	14	Power (High-Low)

No.	Name	No.	Name
6	Easy Pairing [On/Off]	15	Weather Alert
7	Call Tone [number]	16	Battery (3 Battery Levels)
8	Scan	17	Channel and Bluetooth Headset (BH)
9	- Interference Eliminator Code Number (used for Call Tone) On/Off; OFF/L1/L2/L3 (used for IVOX and VOX) - BH Volume level		

 **NOTE:** After the last button is pressed, the radio screen dims after five seconds. After another five seconds, the radio screen turns off for battery saving purposes, with only the LED blinking. To resume the display, you must press any button except the Flashlight button.

Getting Started

This section helps you to get familiar with the basic operations of the radio.

Personalization Stickers

Stickers are provided to personalize and keep track of radios. You can use permanent markers for blank stickers.

Installing Batteries

The radio can use either one NiMH rechargeable battery pack or three AA alkaline batteries. The radio beeps when the battery levels are low.

1. Turn the radio off.
2. To unlock the battery cover, face the back of the radio and push the latch on the battery cover to the left.
3. For the NiMH battery pack, insert the battery pack by following the instructions on the battery pack. For AA alkaline batteries, insert the batteries.



CAUTION: Observe the polarity of the batteries.



NOTE: The ribbon should be underneath the battery pack or batteries and must wrap around the right side of the pack or batteries for easy removal.

4. To lock the battery cover, close the battery cover and push the latch to the right.

Charging The Battery

The USB-C charging cable allows you to charge your NiMH battery pack from a power source such as USB power bank or USB capable wall charger.

Turn off your radio.

1. Plug the USB-C cable into the charging port on your radio.
2. Connect the USB charging cable to a power source.

The battery meter bar scrolls when the battery is charging.



NOTE:

- An empty battery will be fully charged in 11 hr.
- When moving between hot and cold temperatures, do not charge the NiMH battery pack until the battery temperature acclimates, which usually takes about 20 minutes.
- For optimal battery life, remove the radio from the charger within 16 hours. Do not store the radio while connected to the charger.

Attaching the Belt Clip

1. Attach the belt clip to the back of the radio until the clip clicks in place.
2. Attach the belt clip to pocket or belt strap until the clip clicks in place.

Removing the Belt Clip

1. Pull the release tab on top of the belt clip to release the latch.
2. Push the belt clip with the other hand towards the top of radio.

Turning the Radio On

To turn on the radio, rotate the **Power/Volume** knob clockwise.

- The radio chirps and briefly shows all feature icons available on the radio.
- The display screen shows the current channel, code, and all features that are enabled. The radio is now in the Two-Way mode.

Turning the Radio Off

To turn off the radio, rotate the **Power/Volume** knob counterclockwise.

Navigating the Menu Pages

This chapter shows the ways you can navigate through the buttons in various modes and the instructions.

Use the **Menu** button to scroll through the menu screen.

Figure 3: Weather Mode Menu

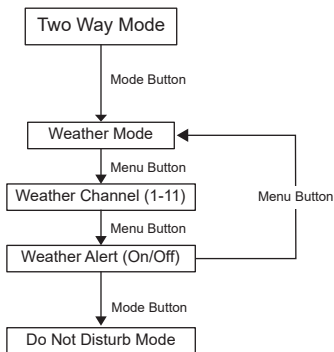
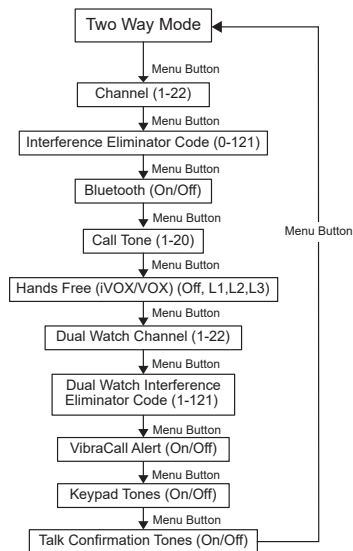


Figure 4: Two-Way Mode Menu



Radio Usage

This section shows the ways you can use your radio.

Selecting Channels

Your radio has 22 channels. A channel is the frequency that your radio uses to transmit. For more details, see [Channels and Frequencies](#) on page 20.

1. Turn on the radio and press the **Menu/Lock** button until the channel number blinks.
 - When the radio is on the 0.5 W channel, the **Lo** icon is displayed.
 - When the radio is on the 2 W channel, the **Hi** icon is displayed.
 - The current channel blinks.
2. To change the channel, press the **+** or **-** button.
Pressing and holding the keys allows you to scroll through the channel rapidly.
3. To confirm the channel and exit menu, press the **PTT** button.
You can continue the set-up by pressing the **Menu/Lock** button.

Selecting the Interference Eliminator Codes

Interference Eliminator Codes help minimize interference by blocking transmissions from unknown sources. Your radio has 121 Interference Eliminator Codes. Codes 1–38 are standard analog codes that appear on other Family Radio Service (FRS) radios. Codes 39–121 are additional digital codes added for superior interference protection. 0 is the off position with analog or digital codes not enabled.

1. Press the **Menu/Lock** button until the code starts to blink.
2. To select the code, press the **+** or **-** button.
Pressing and holding the keys allows you to scroll through the codes rapidly.
3. To save the code setting and exit Menu, press the **PTT** button.
You can continue the set-up by pressing the **Menu/Lock** button.



NOTE:

You can set a different code for each channel using this procedure.

On a radio that uses Interference Eliminator Codes, the code must be set to **0** to communicate with radios that do not have Interference Eliminator Codes. Select **0** from the radio display to disable tone and code.

Switching Modes

To switch between the Two-Way, Weather, and Do Not Disturb modes, press the **Mode** button.

- When the radio is in Two-Way mode, the **2-WAY** icon is displayed.
- When the radio is in Weather mode, the **WEATHER** icon is displayed.
- When the radio is in Do Not Disturb mode, the Moon icon is displayed.
- Corresponding settings and information are shown on the display.

Making Calls on the Radio

1. Set all the radios in your group to the same channel and interference eliminator code.
2. To call, press and hold the **PTT** button.



NOTE: Your radio is designed to maximize performance and improve transmission range. The minimum talk range is 5 ft apart.

If the call is a high-power transmission, your radio display shows **Hi**. If the call is a low-power transmission, your radio display shows **Lo**. Screen times out except for the **Tx**, **Hi**, or **Lo**, and battery icons. These icons remain lit until the **PTT** button is released.

3. For a maximum voice clarity, hold your radio an inch away from your mouth and speak directly into the microphone.
Do not cover the microphone while talking.
4. To listen, release the **PTT** button.

Transmitting the Power Levels

- To boost the power of your radio when talking, press **H**, the top portion of the **PTT** button.
- To conserve the energy of your battery, press **L**, the lower part of the **PTT** button.



NOTE: Channel 8 to 14 transmits on low power regardless of where the **PTT** button is pressed. See [Channels and Frequencies](#) on page 20.

Monitoring Channels

To enter the Monitor mode and listen for weak signals on the current channel, press and hold the **Scan/Monitor** button for three seconds.



NOTE: You can also listen to the volume level of the radio when you are not receiving calls. If necessary, you can adjust the volume.

Setting the Volume

Perform one of the following actions:

- To increase volume, turn the **Power/Volume** knob clockwise.
- To decrease volume, turn the **Power/Volume** knob counterclockwise.

To adjust the headset volume connected over Bluetooth, refer to [Connecting a Bluetooth Headset-to-Radio](#) on page 14.



CAUTION: Do not hold the radio close to your ear. If the volume is set to an uncomfortable level, it could hurt your ear.

Setting and Transmitting Call Tones

Your radio can transmit different call tones to other radios in your group. Call tones allow you to alert other radios when you want to talk. Your radio has 20 call tones to choose.

1. Press the **Menu/Lock** button until the **Call Tone** icon appears. The display shows the current call tone setting.
2. To change and listen to the call tones, press the **+** or **-** button.

NOTE: Setting the call tone to **0** disables the call tone feature.
3. To set the new call tone and exit Menu, press the **PTT** button. You can continue the set-up by pressing the **Menu/Lock** button.
4. To transmit your call tone to other radios with the same channel and Interference Eliminator Code, press the **Call Tone** button.

Setting the Keypad Tones

You can enable or disable the speaker key tones. You hear the key tone each time you push a button.

1. Press the **Menu/Lock** button until the radio displays **Keypad Tone** icon.

The current on/off setting blinks.

2. To turn on or off keypad tones, press the **+** or **-** button.
3. To confirm and exit menu, press the **PTT** button. You can continue the set-up by pressing the **Menu/Lock** button.



NOTE: The following features are not disabled when the keypad tone feature is turned off:

- Transmit timeout alert tone.
- Call tone.
- Low battery alert tone.
- The transmitted talk confirmation tone.

Transmitting a Talk Confirmation Tones

You can set your radio to transmit a unique tone when you finish transmitting, similar to saying "Roger" or "Over" to let others know you are finished talking.

1. Press the **Menu/Lock** button until the radio displays **Roger Tone** icon.

The current setting blinks.

2. To turn the confirmation tone on or off, press the **+** or **-** button.
3. To confirm and exit menu, press the **PTT** button. You can continue the set-up by pressing the **Menu/Lock** button.

Turning LED Flashlight On or Off

1. To turn the light on, press the **Flashlight** button.
2. To turn the light off, press the **Flashlight** button again.



NOTE: You can turn off the flashlight when not in use to conserve battery power.

Locking or Unlocking the Keypad

1. To prevent accidental changes to the settings, lock the keypad by pressing and holding the **Menu/Lock** button until the radio displays the **Keypad Lock** icon.

When in lock mode, you can turn the radio on and off, adjust the volume, receive, transmit, send a call tone, send the Emergency Alert, turn the LED flashlight on and off, and monitor channels. All other functions are locked.

- To unlock the keypad, press and hold the **Menu/Lock** button until the **Keypad Lock** icon disappears.

Advanced Features

This chapter explains the advanced features of your radio.

Bluetooth

The radio uses Bluetooth Low Energy (LE) version 5.2 and is compatible with smartphones with IOS version 13 onwards and Android version 10 onwards.

The Bluetooth enables the connection between radio and smartphone and between radio and headset. Once your smartphone is connected to your radio over Bluetooth, the Talkabout smartphone application enables communication options beyond push-to-talk on the radio. The Talkabout application uses the T8XX as a modem to send messages, locations, and others through the radio frequencies to the other T8XX users.

Talkabout Application

Installing the Talkabout Application on your smartphone and connecting your smartphone to your radio over Bluetooth allows you to share your location, use text messaging, and use your smartphone to **PTT** without the cell phone service. The feature also offers recording tracks and controlling the radio settings by your smartphone. Talkabout application feature assists in connecting a bluetooth earpiece to the radio.

This application is free and can be downloaded from the App Store for IOS devices and from Google Play for Android devices. To find the appropriate application, you can search for Motorola Talkabout Application. User instructions are embedded in the application.

Connecting to the Talkabout Application through Bluetooth

- To connect the radio with the Talkabout application from your smartphone, turn on Bluetooth on your radio.
 - Ensure that Bluetooth on your smartphone is always on.
 - Ensure that the Talkabout application is accepted when prompted during the talkabout application installation.
- Press the **Menu/Lock** button on your radio until the Bluetooth icon appears.
 - To change the setting, press the **+** or **-** button on your radio.

- To confirm the setting, press the **PTT** button and exit menu.

You can continue the set-up by pressing the **Menu/Lock** button.

The Bluetooth icon illuminates for five seconds indicating the radio is ready for pairing and continues to blink quickly for 90 seconds waiting to be paired. If pairing is not successful, the radio sounds a tone at 60 seconds and 90 seconds before Bluetooth turns off to preserve the battery life.

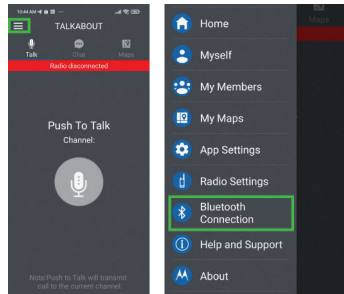
If pairing is successful, the Bluetooth icon illuminates for three seconds indicating a successful Bluetooth connection. When Bluetooth is connected, the Bluetooth icon continues to blink slowly.



NOTE:

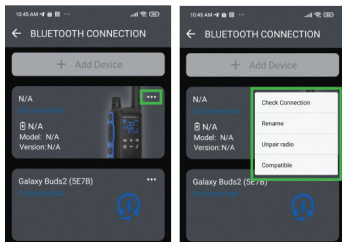
When the radio and phone are paired, reconnecting happens automatically when the Bluetooth on the radio is turned on. When the Bluetooth connection between the radio and the phone is lost for more than 90 seconds, Bluetooth on the radio is turned off to preserve the battery life.

- To pair your phone during the initial application set-up, follow the prompts on the Talkabout application.
- To unpair and pair with another phone or check your connection, click on the **Main Menu → Bluetooth Connection**.



6. Click on the **3-dot Menu** and select one of the followings:

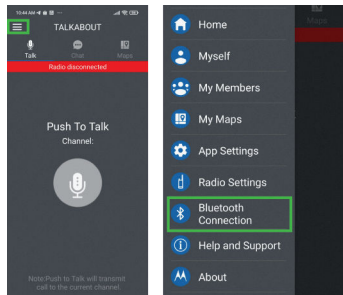
- Check Connection
- Rename
- Unpair radio
- Compatible



Connecting a Bluetooth Headset-to-Radio

The Talkabout application connects a Bluetooth headset to the radio. Ensure your smartphone and Talkabout application is connected to the radio.

1. To pair the headset to the radio, click on the **Main Menu** → **Bluetooth Connection**.



2. Select **Add Device**.



Ensure your headset is in pairing mode and nearby.

After pairing the Bluetooth headset for the first time to your radio, the subsequent connection is done without the Talkabout application. The Bluetooth headset can be connected directly to your radio.

Ensure that the radio Bluetooth feature is turned on and the headset is nearby.

3. To adjust the Bluetooth Headset volume after pairing to the radio, press the **+** or **-** button on your radio.
Radio displays **BH** when adjusting the volume.
4. To use the microphone on your headset when making a call, press and hold the **PTT** button on the radio.

Radio Compatibility

Compatibility between different models is restricted for the T800 series. The T800/T801 models are compatible with each other, and the T802/T803 or above models are compatible with each other. The T802/T803 models have light gray buttons on the front of the radio, and black buttons on the side of the radio.

Configuring the iVOX or VOX

With the Internal Voice Operated Transmission (iVOX) or Voice Operated Transmission (VOX), you can begin transmission by speaking into the microphone of the radio or audio accessory instead of pressing the **PTT** button.

Table 3: Transmission Sensitivity

Classification	Description
L3	High Sensitivity for quiet environments.
L2	Medium Sensitivity for most environments.
L1	Low Sensitivity for noisy environments.

1. Press the **Menu** button until the radio displays **iVOX** icon.
The radio displays **VOX** icon when an audio accessory is connected.
The current setting (Off, L1–L3) blinks.
2. To select the sensitivity level, press the **+** or **-** button.
3. To exit menu, press the **PTT** button.
You can continue the set-up by pressing the **Menu** button.

 **NOTE:** Using the iVOX or VOX causes a short delay in transmission.

Setting the Dual Watch Mode

The Dual Watch mode enables you to scan the current channel and another channel alternately.

1. Press the **Menu/Lock** button until the **Dual Watch** icon blinks.
The current call setting blinks.
2. To select the channel, press the **+** or **-** button. Then press the **Menu/Lock** button.
3. To select the code, press the **+** or **-** button.
4. To activate Dual Watch, press the **PTT** button or wait until time out.
The screen alternates between the Home Channel and Dual Watch Channel.
5. To end Dual Watch mode, press the **Menu/Lock** button.



NOTE: If you set the same channel and code as the current channel, the Dual Watch Mode is not enabled.

Setting the VibraCall™ Alert

The VibraCall™ is a vibrating alert that notifies you when your radio receives a message. The Vibrate Alert is triggered when you receive a call and is triggered again only if no activity occurs in 30 seconds after the previous call.

1. To turn the vibrating alerts on, press the **Menu/Lock** button until the radio displays the **VibraCall** icon.
The current setting blinks.
2. To alternate between on and off, press the **+** or **-** button.
3. To confirm, press the **PTT** button and exit menu.
You can continue the set-up by pressing the **Menu/Lock** button.

Setting the Emergency Alert Mode

The Emergency Alert feature can be used to signal members in your group of your need for urgent help. T800 series radios operate in an automatic hands-free emergency control mode for a total of 30 seconds after activating the Emergency Alert. The radios in your group automatically advance the speaker volume to the maximum setting and play a tone for eight seconds. The alert tone is emitted from your own radio speaker and the receiving radios in your group. After the eight seconds alert, any spoken words or incidental sounds at your end is transmitted to the group for 22 seconds. For the 30 seconds duration

of Emergency Alert mode, the radio controls and buttons are locked to maximize reception of the emergency message.

1. Press and hold the **Emergency** button for three seconds.
2. To initiate the alert tone, release the button.



NOTE: You do not need to continue to hold the **Emergency** button or use the **PTT** button to transmit your message.

3. After the alert tone ends, speak into the microphone.
 - Your voice or incidental sounds is transmitted.
 - Your radio speaker emits a Talk Confirmation Tone after 30 seconds. Operation then returns to the normal Two-Way mode.
 - If your radio is connected to the Talkabout application when an Emergency Alert is triggered, the S.O.S message that is pre-saved in your Talkabout application is sent out to everyone in range that has Talkabout application and is connected with the application. You must have the Talkabout application connected to receive the S.O.S message.
4. To customize the S.O.S message, refer to the Talkabout application in radio setting.



NOTE: All Motorola Solutions Talkabout EM, MJ, MR, MT, MU, T400, T500, T600, T800 series radio (except for the T400 model) are fully compatible with the Emergency Alert feature. Radios other than EM, MJ, MR, MT, MU, T400, T500, T600, T800 series can receive the emergency alert signal, but do not respond with adjusted volume settings, locked controls, or a warbling alert tone. Users of other radio models set to the same channel and Interference Eliminator Code hear a steady tone for eight seconds followed by the voice transmission for 22 seconds.



WARNING: The Emergency Alert feature must only be used in the event of an actual emergency. Motorola Solutions is not responsible if there is no response to the emergency alert from the receiving group.

Operating Easy Pairing

The Easy Pairing feature allows all radios in a group to be programmed simultaneously to the same channel and Interference Eliminator Code. Any one radio in the group can be set as the leader. The channel and

Interference Eliminator Code settings of the leader can be copied to the other radios in the group.

1. Pick any radio as the leader. Program the channel and Interference Eliminator Code to the desired settings on this radio.

See [Selecting Channels](#) on page 11 and [Selecting the Interference Eliminator Codes](#) on page 11.

2. To copy the channel and Interference Eliminator Code combination to all the other member radios, press and hold the **Easy Pairing/Location Sharing** button on the member radios until you hear a beep.

To program all the radios at the same time, the radios in the group must perform these step at the same time.

The **Easy Pairing** icon blinks indicating that the radio is in Easy Pairing Mode and waiting to receive the settings from the leader. The radio stays in this mode for three minutes.

3. Release the button after the beep and wait for the transmission from the leader radio.
4. On the leader radio, press and hold the **Easy Pairing/Location Sharing** button until you hear a double beep.

At the double beep, the radios in the group copy the transmitted channel and Interference Eliminator Code settings of the leader.



NOTE:

The leader radio must make this transmission when all the member radios are still in the Easy Pairing mode. Otherwise the transmission is not picked up.

The leader must not release the **Easy Pairing** button at the first tone. Otherwise the radio becomes a recipient. If this action happens, you must press the **PTT** button to escape and then retry the step.

Sharing Your Location

To share and request a location update, perform one of the following actions:

- Use the Talkabout application to set your preferences on sharing your location.

- To manually share your location, press the **Easy Pairing/Location Sharing** button.

This functionality is only activated when paired over Bluetooth to your smartphone.

Scan

Scanning allows you to search all channels for transmissions from unknown parties, search for someone in your group who accidentally changed channels, or search for unused channels for your own use.

The Scan feature includes a priority feature, Basic Scan Mode, and Advanced Scan Mode for effective searching. The Basic Scan Mode uses the channel and code combination that are set for each channel or the default code value of 1.

The Advanced Scan Mode scans all channels for codes, detects any code in use, and temporarily uses that code value for that channel. Priority is given to the Home Channel. The Home Channel is the channel and Interference Eliminator Code that your radio is set to when you start the scan. As the Home Channel is scanned more often than other channels, your radio responds quickly to any activity on the Home Channel.

Scanning Channels



NOTE:

- If you press the **PTT** button while the radio is scrolling through inactive channels, the transmission occurs on the Home Channel. Scanning resumes five seconds after the end of your transmission. You can stop scanning at any time by pressing the **Scan/Monitor** button.
- If the radio stops on an undesired transmission, you can resume the scan by pressing the **+** or **-** button.
- If the radio repeatedly stops on an undesired transmission, you can temporarily remove that channel from the scan list by pressing and holding the **+** or **-** button for three seconds. You can remove more than one channel in this way.
- You can restore the removed channels to the scan list by turning off the radio and turning it back on. Another method is to exit and re-enter the scanning mode by pressing the **Scan/Monitor** button.
- You cannot remove the Home Channel from the scan list.
- In Advanced Scan, the detected code can only be used for one transmission. You must note that code, exit scan, and set that detected code on that channel to permanently use the detected code.

Basic Scanning

- Press the **Scan/Monitor** button.

The radio displays scan icon on the display and the radio begins to scroll through the channel and code combinations. Your radio stops scrolling when it detects channel activity that matches the channel and code combination. You can hear the transmission.

- To respond and talk to the person transmitting, press the **PTT** button in five seconds after the end of the transmission.

The radio resumes scrolling through the channels five seconds after the end of any received activity.

- To stop scanning, press the **Scan/Monitor** button.

Advanced Scanning

- Set the Interference Eliminator Code to **zero** or **OFF**.

- Press the **Scan/Monitor** button.
 - The radio displays the scan icon on the display and the radio begins to scroll through the channels. No Interference Eliminator Codes filter what is heard.
 - When the radio detects channel activity with any or no code, the radio stops scrolling and you can hear the transmission. Radio detects and displays the Interference Eliminator Code that is in use.
- To respond and talk to the person transmitting, press the **PTT** button in five seconds after the end of the transmission.
The radio transmits by using the newly detected Interference Eliminator Code.
The radio resumes scrolling through the channels five seconds after the end of any received activity.
- To stop scanning, press the **Scan/Monitor** button.

Weatherproof Function

This radio is weatherproof to IP-54 standards. The radio is resistant to occasional splash of water only when the battery and connector covers are sealed.

-  **NOTE:**
- Do not** expose the radio to water for extended period of time.
 - Do not** submerge the radio in water.

Weather Receiver

Your radio can tune in to broadcasts by the United States National Oceanic and Atmospheric Administration (NOAA) Weather Radio and Environment and Climate Change Canada (ECCC) Weather Radio.

You can listen to a weather channel or set your radio to alert you to emergency weather broadcasts that interrupt routine broadcasts. See [Weather Channels and Frequencies](#) on page 19 for details. When you listen to a weather channel, you cannot use your radio in scan mode or for Two-Way communications.

Both NOAA and ECCC have transmitters located throughout the United States and Canada, respectively. These transmitters broadcast watches, forecasts, and other information 24 hours a day.

-  **NOTE:** NOAA weather radio stations are assigned to cover specific areas and service may be limited. To view the appropriate transmitter for your area, check with your local weather office for frequency and details or visit <http://www.weather.gov/nwr> in the US. The use of the NOAA logo does not provide an endorsement or implied endorsement by the National Weather Service of NOAA, nor does the use of the Weather Radio logo provide an endorsement or implied endorsement by Environment and Climate Change Canada (ECCC).

Selecting the Weather Mode

To enter the Weather mode from the Two-Way mode, press the **Mode** button.

Setting the Weather Channel

Your radio receives weather frequencies.

- In Weather mode, press the **Menu/Lock** button until the weather channel number blinks.
- To select the appropriate channel with good reception in your area, press the **+** or **-** button.
- To confirm the channel and exit menu, press the **PTT** button.
You can continue the set-up by pressing the **Menu/Lock** button.

Setting the Weather Alert

Your radio can be set to respond to the National Oceanic and Atmospheric Administration (NOAA) Weather Radio emergency messages. A special alarm tone sounds an alert and turns on the weather receiver to give you immediate weather and emergency information.

- In Weather mode, press the **Menu/Lock** button twice until the Weather Alert icon is displayed.
- To select on or off, press the **+** or **-** button.
- To exit the weather menu set-up, press the **PTT** button or the **Menu/Lock** button.
- To return to Two-Way mode, press the **Mode** button.

If you activate the Weather Alert and return to Two-Way mode, the radio displays the Weather Alert icon.



NOTE:

- The weather mode automatically reverts to Two-Way mode when the weather channel is activated, either manually or after receiving an alert, and no buttons are pressed for five minutes.
- The weather channel reception depends on how close you are to a transmitter and whether you are indoors or outdoors. Since weather channels are transmitted without codes, they may contain static or noise. Weather Alert does not function while actively transmitting or receiving in Two-Way mode.

Weather Channels and Frequencies

Table 4: Frequencies of Weather Channels

Weather Channel	Frequency
WX1	162.550 MHz
WX2	162.400 MHz
WX3	162.475 MHz
WX4	162.425 MHz
WX5	162.450 MHz
WX6	162.500 MHz
WX7	162.525 MHz
WX8	161.650 MHz
WX9	161.775 MHz
WX10	161.750 MHz
WX11	162.000 MHz

Do Not Disturb Mode

The Do Not Disturb (DND) features allow you to disable the reception from regular two-way calls, while still receiving weather alerts and receiving and transmitting emergency alerts.

When the feature is enabled, you can receive important weather alerts, but you are not disturbed by incoming radio chatter. The radio displays moon icon when the feature is enabled.

Motorola Solutions recommends that you to plug in and turn on the radio when using the feature.



NOTE:

The feature only work in areas that have weather service and are available in USA and Canada only.

Tune in to the correct weather channel for your area and turn on the weather alert feature before activating the DND feature.

Entering Do Not Disturb Mode

1. From the Two-Way mode, press the **Mode** button twice to enter the Do Not Disturb (DND) mode.

The radio displays the moon icon.

2. To switch out of the DND mode, press the **PTT** button and start transmission.

Your radio temporarily switches to the Two-Way mode. Five minutes after you release the **PTT** button, your radio automatically reverts to the DND mode.

3. To exit the DND mode, press the **Mode** button and return to the Two-Way mode.

Additional Information

Radio Battery Meter

The number of bars (0–3) on the **Battery Power** icon indicates the remaining power of the battery. When the power level of the battery reduces to one level, the Low Battery Alert starts. Your radio plays a tone periodically or after releasing the **PTT** button.

Maintaining the Battery Capacity

- Charge the NiMH batteries once every three months when not in use.

After a longer time, the duration for your radio to start charging increases and can take up to five minutes.

- Remove your radio from the charger within 16 hours. Do not store your radio while connected to the charger.
- Remove the battery before storing your radio.
Batteries corrode over time and can permanently damage your radio.
- Store NiMH batteries in temperatures between -20 to 35°C and in low humidity. Avoid damp conditions and corrosive materials.

Push-to-Talk Timeout Timer

Push-to-Talk Timeout Timer prevents accidental transmissions and saves battery life. If you press the **PTT** button for more than 60 seconds, your radio plays a continuous warning tone and stops transmitting.

Channels and Frequencies

The Family Radio Service (FRS) device is approved for USA and Canada.

Table 5: Channels and Frequencies

Channel	Frequency (MHz)	Max Power Output-Effective radiated power (ERP)
1	462.5625	2.0 W
2	462.5875	2.0 W
3	462.6125	2.0 W
4	462.6375	2.0 W
5	462.6625	2.0 W
6	462.6875	2.0 W
7	462.7125	2.0 W
8	467.5625	0.5 W
9	467.5875	0.5 W
10	467.6125	0.5 W
11	467.6375	0.5 W

Channel	Frequency (MHz)	Max Power Output-Effective radiated power (ERP)
12	467.6625	0.5 W
13	467.6875	0.5 W
14	467.7125	0.5 W
15	462.5500	2.0 W
16	462.5750	2.0 W
17	462.6000	2.0 W
18	462.6250	2.0 W
19	462.6500	2.0 W
20	462.6750	2.0 W
21	462.7000	2.0 W
22	462.7250	2.0 W



NOTE: Power refers to the maximum allowable power as defined by FCC/ISED for each channel under FRS rules for the USA and FRS/GMRS for Canada and is not a reflection of the power specification of the radio.

Licensing Information

USA (FCC)/CANADA (ISED)

According to FCC Part 95, FRS devices do not require a license.

Use of Motorola Solutions radio in Canada is subject to the rules and regulations in ISED RSS 210 and do not require a license.

Changes or modifications not expressly approved by Motorola Solutions may void the user authority granted by the FCC or ISED to operate this radio and should not be made. To comply with FCC or ISED requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services.

Replacement of any transmitter component (crystal, semiconductor, etc) not authorized by the FCC or ISED equipment authorization for this radio could violate FCC or ISED rules.



NOTE: Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited

Warranty

Consumer Two-Way Radio Products and Accessories purchased in the United States or Canada

What Does this Warranty Cover?

Subject to the exclusions contained below, Motorola Solutions, Inc. ("Motorola") warrants the Motorola branded consumer Two-Way radios that operate via Family Radio Service or General Mobile Radio Service ("Products"), the Motorola branded or certified accessories sold for use with these Products ("Accessories") to be free from defects in materials and quality of work under normal consumer usage for the periods outlined below.

This limited warranty is the exclusive remedy of a consumer, and applies as follows to new Products and Accessories and purchased by consumers in the United States or Canada, which are accompanied by this written warranty.

Who Is Covered?

This warranty extends only to the first consumer purchaser, and is not transferable.

What will MOTOROLA SOLUTIONS, INC. do?

Motorola Solutions, Inc., at its option, will at no charge repair, replace or refund the purchase price of any Products or Accessories that do not conform to this warranty. We may use functionally equivalent reconditioned/refurbished/pre-owned or new Products or Accessories.

What Other Limitations Are There?

Any Implied Warranties, Including Without Limitation. The implied warranties of merchantability and fitness for a particular purpose, shall be limited to the duration of this limited warranty, otherwise the repair, replacement, or refund as provided under this express limited warranty

is the exclusive remedy of the consumers, and is provided in lieu of all other warranties, express or implied.

In no event shall Motorola Solutions be liable, whether in contract or tort (including negligence) for damages in excess of the purchase price of the product or accessory, or for any indirect, incidental, special or consequential damages of any kind, or loss of revenue or profits, loss of business, loss of information or other financial loss arising out of or in connection with the ability or inability to use the products or accessories to the full extent these damages may be disclaimed by law.

Some states and jurisdictions do not allow the limitation or exclusion of incidental or consequential damages, or limitation on the length of an implied warranty, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state or from one jurisdiction to another.

Table 6: Warranty Coverage

Products Covered	Length Of Coverage
Products and Accessories as defined above, unless otherwise provided for below.	Two (2) years from the date of purchase by the first consumer purchaser of the product unless otherwise provided for below.
Batteries whose fully charged capacity falls below 80 % of their rated capacity and batteries that leak.	Ninety (90) days from the date of purchase.
Products and Accessories that are repaired or replaced.	The balance of the original warranty or for ninety (90) days from the date returned to the consumer, whichever is longer.

Exclusions From Warranty Coverage

Normal Wear and Tear:

Periodic maintenance, repair and replacement of Products or Accessories due to normal wear and tear.

Abuse & Misuse:

Defects or damage that result from: (a) improper operation, storage, misuse or abuse, accident or neglect, such as physical damage (cracks, scratches, etc.) to the surface of the Products and Accessories resulting from misuse; (b) contact with liquid, water, rain, extreme humidity or heavy perspiration, sand, dirt or the like, extreme heat, or food; (c) use of the Products or Accessories for commercial purposes or subjecting the Product or Accessory to abnormal usage or conditions; or (d) other acts which are not the fault of Motorola Solutions.

Use of Non-Motorola Solutions branded Products and Accessories:

Defects or damage that result from the use of Non-Motorola Solutions branded or certified products, accessories, software or other peripheral equipment.

Unauthorized Service or Modification:

Defects or damages resulting from service, testing, adjustment, installation, maintenance, alteration, or modification in any way by someone other than Motorola Solutions or its authorized service centers.

Altered Products:

Products or Accessories with (a) serial numbers or date tags that have been removed, altered or obliterated; (b) broken seals or that show evidence of tampering; (c) mismatched board serial numbers; or (d) nonconforming or non-Motorola Solutions branded housings, or parts.

Communication Services:

Defects, damages, or the failure of Products or Accessories due to any communication service or signal you may subscribe to or use with the Products or Accessories.

How to Obtain Warranty Service or Other Information?

To obtain service or information, call the following contact:

Table 7: Warranty Service Information

Region	Contact
USA and Canada Two-Way Radios	1-800-448-6686

Region	Contact
	https://www.motorolasolutions.com/talkabout

For Accessories:

Call the telephone number designated above for the Product with which they are used.

You will receive instructions on how to ship the Products or Accessories at your expense, to Motorola Solutions or a Motorola Solutions Authorized Repair Center. To obtain service, you must include: (a) a copy of your receipt, bill of sale or other comparable proof of purchase; (b) a written description of the problem; (c) the name of your service provider, if applicable; (d) the name and location of the installation facility (if applicable) and, most importantly; (e) your address and telephone number.