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User's Guide
Manuel de l'Utilisateur
Manual del Usuario

TALKABOUT[®]
TWO-WAY RADIO
RADIO BIDIRECTIONNELLE
RADIO DE DOS VÍAS



Models T5100 and T5200

T5100 Series Canada and US

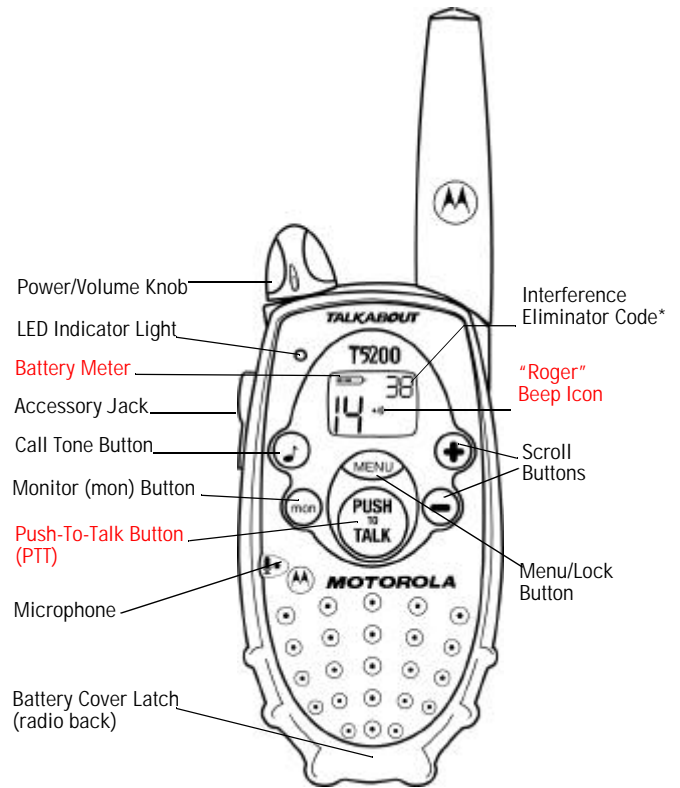
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Your New Radio

Motorola Talkabout T5100 and T5200 radios operate on Family Radio Service (FRS) designated frequencies. This license-free, short range, two-way radio service was established specifically for family and group recreational use.

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



*T5200 Only

Batteries

T5100 and T5200 radios operate with 3 AA alkaline batteries providing approximately 30 hours of use. That is almost 3 hours of talk and over 27 hours of standby time.

To Install:

1. With back of radio facing you, flip Battery Cover Latch up to release. Lift cover off. Fig. 1.
2. Insert 3 AA batteries as shown. Fig. 2.
3. Replace battery cover. Reposition Battery Cover, flip Battery Cover Latch down to secure.

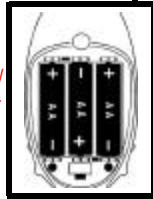


Figure 2

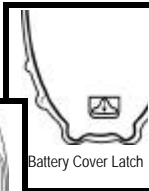


Figure 1

Radio Etiquette:

Your radio has multiple channels shared on a "take turns" basis. This means other groups may be talking on the channels. For uninterrupted communications, do not talk over someone who is already using the channel – your message may not be completely heard. Try changing the channel to avoid channel congestion or use the Monitor button to check for channel activity. If you hear static while holding down the Monitor button the channel is clear for use.

Note: Since the channels are shared, your conversations will not be private and you may hear others talking.

Belt Clip

Motorola T5100 and T5200 radios come with a swivel belt clip.

To Attach:

1. Align belt clip post with hole in the radio back.
2. Gently push until it clicks into place. Fig. 3.



Figure 3

To Remove:

1. Push release tab on top of belt clip down to release catch.
2. Pull belt clip from the radio back.

Removable Front Cover:

The T5100 and T5200 radios have a removable front cover. To Remove, press down on the tab at the bottom of the radio with your fingernail or a small coin. Figure 4. Pull the bottom of the removable cover away from the radio. To Install, reinsert housing tab and press down to snap cover into place.

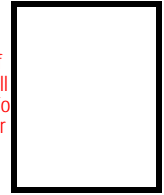


Figure 4

To Communicate

Read this manual carefully and make sure you know how to properly operate radio before use.

Motorola Talkabout two-way radios have 14 channels*. To communicate with others, all radios in your group must be set to the same channel. Other FRS radios, such as the T5200, may have Interference Eliminator Codes, which must be turned off or set to zero for proper communication with T5100 radios.

Turn The Radio On:

1. Rotate Power/Volume knob clockwise until you hear a click. Radio will beep and LED Indicator Light will flash to confirm. The display will show current channel and code (T5200 only). LED will flash every three seconds.
2. To turn radio off, rotate Power/Volume knob counter clockwise until you hear a click and display disappears.

Note: All icons on the display will light up briefly, some of which may not be supported by your radio.

Monitor Button:

The Monitor (mon) button lets you hear the radio's volume level when you are not receiving so you can adjust the volume. It is also used to check activity on current channel before transmitting. The radio also has a Channel Busy Indicator where the LED will also flash twice per second to indicate the channel frequency is in use.

Adjust The Volume:

Rotate Power/Volume knob while holding down the Monitor button until you reach a comfortable listening level. Rotate knob clockwise to increase and counter clockwise to decrease volume.

Time-out Timer:

The Time-out Timer feature helps extend battery life by preventing accidental transmission. The radio will emit a continuous warning tone after the Push-To-Talk button is pressed for 60 continuous seconds and will stop transmitting.

* Chile and Argentina radios have 7 frequencies (channels) only.

Set The Channel:

1. With radio on, press Menu button, Current channel will begin to flash. Figure 5.
2. Use Scroll buttons to change channel while flashing.
3. Press Menu or Push-To-Talk button to set new channel.

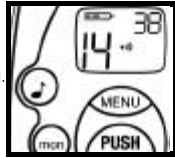


Figure 5

Set The Code: (T5200 only)

1. With radio on, press Menu button twice. Current code will begin to flash.
2. Use Scroll buttons to change code while flashing.
3. Press Menu or Push-To-Talk button to set new code.

Note: Radio automatically saves channel (and code for T5200) after 5 seconds.

Call Tone:

The Call Tone get's other's' attention before you start talking. Press Call button and users on your channel will hear your Call Tone. T5100 has a single Call Tone, while the T5200 has 5 Call Tones.

Set The Call Tone (T5200 only)

1. With the radio on, press Menu button three times. Current Call Tone will begin to flash. Fig. 6.
2. Use Scroll buttons to change and hear Call Tone while flashing.
3. Press Menu or Push-To-Talk button to set new Call Tone.

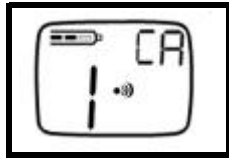


Figure 6

“Roger” Beep:

Whenever you turn on the “Roger” Beep feature, your two-way radio transmits a unique tone when you finish transmitting. It's like saying “Roger” or “Over” and lets others know you're finished talking. If you don't hear _____ or, you can enable it by pressing and holding Scroll + button as you turn on your radio. Now, whenever you release the Push-toTalk button, you let your friends know you're finished talking by transmitting a tone. To disable the “Roger” Beep feature, turn your radio off and then back on while pressing and holding Scroll + button. The “Roger” Beep icon will not appear on the display.

Sending Messages:

1. To maximize clarity, hold radio 2 to 3 inches from mouth.
2. Press and hold Push-To-Talk button and speak into microphone. LED Indicator Light glows continuously when transmitting.
3. To receive messages, release Push-To-Talk button.

Battery Meter

The Battery Meter, located on the front display, is divided into three bars. As power is used, the bars will disappear. Figure 4.



Figure 4

Note: To ensure proper functioning of the battery meter use only alkaline batteries. The meter will not work accurately with rechargeable batteries.

Low Battery Alert:

When batteries are low, radio will beep:

- 3 to 4 seconds after turning power on
- Every 10 minutes in standby mode
- After releasing PTT or Call button

Replace batteries immediately to avoid interrupted use.

Note: Remove batteries before storing your radio for extended periods. Batteries corrode over time and may cause permanent damage to your radio.

To Use Audio Accessories:

1. Make sure radio is off.
2. Open accessory jack cover and plug accessory connector into jack.
3. Turn radio on and lower volume before placing accessory on head or in ear.
4. Press Monitor button while rotating Volume knob to adjust volume to a comfortable listening level.
5. To transmit, press Push-To-Talk on radio or accessory and speak into accessory microphone.
6. To receive, release Push-To-Talk.

Talk Range

Motorola T5100 and T5200 radios have been designed to maximize performance and improve transmission range in the field. It is recommended that you do not use the radios closer than 5 feet apart.



Optimal Range

Maximum talk range in flat, open areas, is up to 2 (two) miles.

Medium Range

Range is decreased when buildings and trees are in the way.

Minimal Range

Dense foliage and mountains can limit range.

Care of Your Radio

To clean the radio, wipe with a soft cloth dampened with water. Do not use cleaners or solvents on the radio; they can harm the radio body and leak inside, causing permanent damage. Battery contacts may be wiped with a dry, lint-free cloth.

If radio gets wet, turn it off and remove batteries immediately. Dry battery compartment with a soft cloth to minimize potential water damage. Leave cover off battery compartment overnight or until completely dry. Do not use radio until completely dry.

SAFETY AND GENERAL INFORMATION
IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION
READ THIS INFORMATION BEFORE USING YOUR RADIO

The information provided in this document supersedes the general safety information contained in user guides published prior to October 2000. For information regarding radio use in a hazardous atmosphere please refer to the Factory Mutual (FM) Approval Manual Supplement or Instruction Card, which is included with radio models that offer this capability.

RF OPERATIONAL CHARACTERISTICS

Your radio contains a transmitter and a receiver. When it is ON, it receives and transmits radio frequency (RF) energy. That radio operates in the frequency range of 450 MHz to 470 MHz.

EXPOSURE TO RADIO FREQUENCY ENERGY

Your Motorola radio is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy (EME):

- United States Federal Communications Commission, Code of Federal Regulations: 47 CFR part 2 sub-part J
- American National Standards Institute (ANSI) / Institute of Electrical and Electronic Engineers (IEEE) C95. 1- 1992
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition
- National Council on Radiation Protection and Measurements (NCRP) of the United States, Report 86, 1986
- International Commission on Non- Ionizing Radiation Protection (ICNIRP) 1998
- National Radiological Protection Board of the United Kingdom 1995
- Ministry of Health (Canada) Safety Code 6. Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, 1999

PORTABLE RADIO OPERATION AND EME EXPOSURE

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the radio and may violate FCC regulations.

DO NOT hold the antenna when the radio is "IN USE". Holding the antenna affects the effective range.

Two-way Radio Operation

When using your radio as a traditional two-way radio, **hold the radio in a vertical position with the microphone 2 to 3 inches (5.0 to 7.5 cm) away from your lips.**



Body-worn Operation

To maintain compliance with FCC RF exposure guidelines, if you wear a radio on your body when transmitting, always place the radio in a **Motorola supplied or approved clip, holder, holster, case, or body harness.** Use of non-Motorola-approved accessories may exceed FCC RF exposure guidelines. **If you do not use a body-worn accessory, ensure the antenna is at least 2 inch (5 cm) from your face when transmitting.**

Approved Accessories

For a list of approved Motorola accessories refer to the two-way radio section of www.motorola.com/store.

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 Health Industry Manufacturers Association recommends that a minimum separation of 6 inches (15 cm) be maintained between a hand-held wireless radio and a pacemaker. These recommendations are consistent with the independent research by, and recommendations of, Wireless Technology Research.

Persons with pacemakers should:

- ALWAYS keep the radio more than 6 inches (15 cm) 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 you have any reason to suspect that interference is taking place.
- #### • Hearing Aids
- Some 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.

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SAFETY AND GENERAL USE WHILE DRIVING

Check the laws and regulations on the use of radios in the area where you drive. Always obey them.

When using your radio while driving, please:

- 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 so require.



WARNING - OPERATIONAL WARNINGS

FOR VEHICLES WITH AN AIR BAG

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

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

NOTE: 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, areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often but not always posted.

BLASTING CAPS AND 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.



CAUTION - OPERATIONAL CAUTIONS

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 touch 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.

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Troubleshooting

Problem	Solution
No Power	Reposition or replace batteries.
Erratic Display	Reposition or replace batteries.
Message Not Transmitted	Make sure the Push-To-Talk button is completely pressed as you transmit. Reposition or replace batteries. Shared Channel may be in use, try another.
Message Not Received	Confirm radios have the same Channel settings and/or the Interference Eliminator Code is inactive (non T5100 radios). Make sure Push-To-Talk is not inadvertently being pressed. Reposition or replace batteries. Obstructions, operating indoors or in vehicles may interfere with communication. Change your location. Check to make sure volume is turned up.
Hearing Other Conversation or Noise on a Channel	Shared Channel may be in use, try changing channels. Radios with Interference Eliminator Codes (like T5200), must have codes off or set to zero to communicate with T5100 radios.
Limited Talk Range	Steel/concrete structures, heavy foliage and use in buildings and in vehicles will decrease range, check for clear line of sight to improve transmission. Wearing radio close to body such as in a pocket or on a belt will decrease range, change location of radio.
Heavy Static or Interference	Radios too close. Radios must be at least 5 feet apart, increase your distance. Radios too far apart. Obstacles interfere with transmission. Talk range is up to 2 miles in clear, unobstructed conditions. Shared Channel may be in use, try another.

Motorola Product Services

If the radio still doesn't work properly, contact your place of purchase or call Motorola Product Services.

1-800-353-2729 USA 1-800-461-4575 Canada
1-800-739-7834 (TTY)

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1 YEAR LIMITED WARRANTY

MOTOROLA, Inc. warrants the enclosed product against defects in material and workmanship under normal use and service for one (1) year provided it is returned in accordance with this warranty. If defective, the product will be repaired or replaced at Motorola's option, at no charge, with dated proof of purchase. This warranty does not cover defects or damage resulting from: misuse, improper operation, unauthorized modification, liquid, batteries, or normal wear and tear.

MOTOROLA IS NOT LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT. FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. HOWEVER, SOME STATES DO NOT ALLOW LIMITATIONS ON INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS. SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

For warranty information and service call:

1-800-353-2729 USA

1-800-461-4575 Canada

FCC/IC LICENSE NOT REQUIRED

FCC/IC Information: Changes or modifications not expressly approved by Motorola may void the user's authority granted by the FCC/IC to operate this radio and should not be made. To comply with FCC/IC 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 users of those services. Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the FCC/IC equipment authorization for this radio could violate FCC/IC rules.

Computer Software Copyrights

The Motorola equipment described in this manual may include copyrighted Motorola computer programs stored in semiconductor memories or other media. Laws in the United States and other countries preserve for Motorola certain exclusive rights for copyrighted computer programs, including the exclusive right to copy or reproduce in any form the copyrighted computer program. Accordingly, any copyrighted Motorola computer programs contained in the Motorola equipment described in this manual may not be copied or reproduced in any manner without the express permission of Motorola, Inc. Furthermore, the purchase of Motorola equipment shall not be deemed to grant either directly or by implication, estoppel, or otherwise any license under the copyrights, patents or patent applications of Motorola, except for the normal nonexclusive, royalty free license to use arising by operation of law in the sale of this product.

Patent Notice

This product is covered by one or more of the following United States Patents:

5896277	5864752	5742484	D399821	D389158
5894592	5789098	5861850	D383745	D389139
5894292	5699006	D408396	D387758	D412501
5893027	5734975	D395882	D389827	

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Accessories

There are many accessories (sold separately) available for T5100 and T5200 radios. For more information check out the brochure we've included with your radio, contact place of purchase or call Motorola at:

1-800-353-2729 USA 1-800-461-4575 Canada
1-800-739-7834 (TTY)

Channel Frequency Chart

Channel	MHz	Channel	MHz
1.....	462.5625	8.....	467.5625
2.....	462.5875	9.....	467.5875
3.....	462.6125	10.....	467.6125
4.....	462.6375	11.....	467.6375
5.....	462.6625	12.....	467.6625
6.....	462.6875	13.....	467.6875
7.....	462.7125	14.....	467.7125

* Chile and Argentina radios have frequencies 1-7 (channels) only due to regional availability.

Interference Eliminator Code Chart

Talkabout Code	Hz Freq	7/7x Code	Talkabout Code	Hz Freq	7/7x Code
1	67.0		20	131.8	G
2	71.9		21	136.5	
3	74.4		22	141.3	
4	77.0	A	23	146.2	
5	79.7		24	151.4	
6	82.5		25	156.7	
7	85.4		26	162.2	
8	88.5	B	27	167.9	
9	91.5		28	173.8	
10	94.8		29	179.9	
11	97.4	C	30	186.2	
12	100.0		31	192.8	
13	103.5		32	203.5	
14	107.2	D	33	210.7	
15	110.9		34	218.1	
16	114.8		35	225.7	
17	118.8	E	36	233.6	
18	123.0		37	241.8	
19	127.3	F	38	250.3	

Note: Carrier Squelch (0) disables Interference Eliminator Codes on T5200. This allows you to monitor all activity on the channel you are using.

For Talkabout compatibility information with other Motorola two-way radios, please call 1-800-353-2729.

Description	T5100 Specs	T5200 Specs
Channels	14	14
Codes	0	38
Operating Frequency	UHF-462.550 to 467.725 MHz	UHF-462.550 to 467.725 MHz
Talk Range	Up to 2 Miles	Up to 2 Miles
Power Source	3 AA Alkaline Batteries	3 AA Alkaline Batteries
Battery Life (talk time)	30 Hours*	30 Hours*
Bandwidth	12.5 kHz	12.5 kHz

*Two-way use is defined as 90% standby time, 5% talk time, and 5% receive time.

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