



MOTOROLA













User's Guide

TALKABOUT®
TWO-WAY RADIO



Models T6300, T6310 and T6320

Contents

	Safety Information	v		T6310 Features	22
	Getting Started	1		Turning On the FM Radio	22
	Installing Batteries	2		Finding an FM Station	22
	CommPort™ Charging Dock	5		Preset FM Stations	23
	Basic Operation of Your Radio	7		T6320 Features	24
	Turning On Your Radio	9		Compass	24
	Talking	11		Thermometer	26
	Before You Can Talk	11		Barometer	27
	To Talk	12		Altimeter	28
	Call Tone and Call Display	13		Advanced Two-Way	29
	Alerts	14		Lock	29
	VibraCall ®	14		LockPlus	29
	Keeping Time	15		Channel Scanning	30
	Setting the Time	15		Talk Confirmation Tone	31
	Setting the Alarm	16		Button Beeps	31
	Stopwatch	17		Automatic Power Off	31
	Hands-Free Use (VOX)	18		Monitor	32
	Privacy	19		Reset	32
	Eavesdrop Reducer	19		Setting the Battery Type	32
	Quiet6000™	19		Use and Care	33
	Weather	20		Contact Information	34
	Turning On the Weather	20		Frequency and Code Charts	35
	Setting the Weather Channel	21		Interference Eliminator Codes	36
	Setting the Weather Alert	21		Troubleshooting	37
				Motorola Limited Warranty	39

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 July 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. The 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:

- 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 Radio Frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, 1999



To assure optimal radio performance and make sure human exposure to radio frequency electromagnetic energy is within the guidelines set forth in the above standards, always adhere to the following procedures:

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 two to three inches (5.0 to 7.5 cm) away from the 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 one inch (2.5 cm) from your body when transmitting.**

Approved Accessories

For a list of approved Motorola accessories visit our website at www.motorola.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 Health Industry Manufacturers Association 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 the independent research by, and recommendations of, Wireless Technology Research.

Persons with pacemakers should:

- ALWAYS keep the radio more than six 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 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.



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.

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.

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.



Charging Safety Instructions

Before using the battery charger, read all instructions and cautionary markings on the:

1. battery
2. battery charger, and
3. radio using the battery.

Caution

To reduce the risk of injury, charge only the rechargeable batteries listed. Other types of batteries may burst, causing personal injury and damage.'

Single-Unit Charger

Kit Number	Description
NTN9393	110V - NiMH Charging Adapter

Batteries

Kit Number	Capacity in milliampere-hour mAh	Description	Composition
NTN9395	550 mAh	T6000-Series	NiMH

Save these Instructions

1. Do not expose the charger to rain or snow.
2. Do not operate the charger if it has received a sharp blow, or has been dropped or damaged in any way.
3. Do not disassemble the charger if it has received a sharp blow, or has been dropped or damaged in any way.
4. Never alter the AC cord or plug provided with the unit. If plug will not fit the outlet, have proper outlet installed by a qualified electrician. An improper condition can result in a risk of electric shock.
5. To reduce risk of damage to cord or plug, pull the plug rather than the cord when disconnecting charger from AC receptacle.
6. To reduce the risk of electric shock, unplug the charger from the outlet before attempting any maintenance or cleaning.
7. Use of an attachment not recommended or sold by Motorola may result in a risk of fire, electric shock, or personal injury.
8. Make sure that the cord is located so that it will not be stepped on, tripped over, or subjected to damage or stress.
9. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and/or electric shock. If an extension cord must be used, make sure:
 - That the pins on the plug of the extension cord are the same number, size and shape as those on the plug of the charger.
 - That the extension cord is properly wired and in good electrical condition, and
 - That the cord size is 18 AWG for lengths up to 100 feet, and 16 AWG for lengths up to 150 feet.
10. The supply cord of this charger cannot be replaced. If the cord is damaged, the charger should be discarded or returned to the point of purchase if within 90 days of purchase.



Getting Started

Hi, I'm QuickStart and I'm going to help you get started!

The Motorola® Talkabout® T6300, T6310, and T6320 radios are durable two-way radios that allow you to stay connected to family, friends, and companions. They operate on Family Radio Service (FRS) frequencies, require no service fee or license, and can be used anywhere in the United States and other areas as listed by the FCC.

But these radios offer more than just a way of keeping in touch. They also help you and your group stay on schedule because a clock, alarm, and stopwatch are built into each model. And they will even alert you with emergency weather broadcasts. The

weather won't ever surprise you again!

The T6310 is a stylish two-way radio that receives FM stereo. It's fun and cool, great for the beach. And it includes all the features found on the Motorola Talkabout T6300.

The T6320 is rugged and sporty. It includes a digital compass, thermometer, barometer, and altimeter, so you won't get lost in the woods or on the mountain. These tools, along with all the other great stuff found on the T6300 radio, make the T6320 essential gear when going outdoors.

The T6300, T6310, and T6320 radios are also easy to use. Just take a few minutes to read this user's guide and you're ready to share your adventure.

A detachable Quick Reference Card is on the back cover.

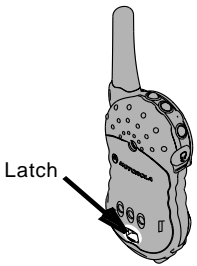




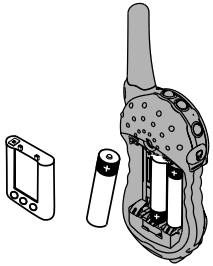
Installing Batteries

Your radio uses three AA batteries or a rechargeable Nickel-Metal Hydride (NiMH) battery.

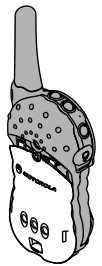
Some radios include a NiMH battery with charger adapter cover, CommPort™ charging dock, and charger. If you don't have these items, they're also available in the NiMH battery upgrade kit (56319).



- Turn off the radio (see page 9).
- Push latch up until it clicks.
- Lift back cover off.








- Remove and replace batteries so the + and - markings match the ones in the compartment or the NiMH charge contacts are facing out.



- Hook back cover on the hinges.
- Align tabs.
- Close battery door, pressing lightly until latch clicks.

Note: The radio keeps the clock settings if battery changes are made in less than 20 seconds. Try replacing one battery at a time.



The battery meter on the top-left corner of the display shows how much battery power you have. It shows  (full),  (two-thirds full),  (one-third full) and  (almost empty). When it's , the radio beeps every ten minutes. So, change or charge those batteries!



Battery Life

The following chart lists the approximate battery life for each type of radio use.

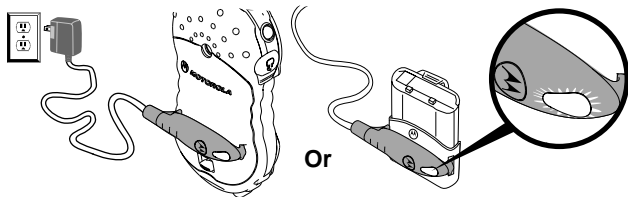
Battery Type	Two-Way Use*	FM Stereo with Earbuds or Headset
AA alkaline	35 hours	30 hours
NiMH	12 hours	9 hours

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

Note: Use earbuds or a headset to minimize battery drain while using the FM stereo feature (T6310 only).

Charging the NiMH battery

Charge the NiMH overnight (12 to 16 hours) before using it for the first time, it will only need up to four hours of charging thereafter.



- Turn off the radio (see page 9) or place the NiMH battery in the charger adapter cover.
- Plug in the charger.

At the contacts on the back of the radio, or if charging just the battery, at the battery contacts:

- Position the charger with the hook on the LED end of the charger placed over the larger slot.
- Snap the hook on the cord end into the smaller slot.

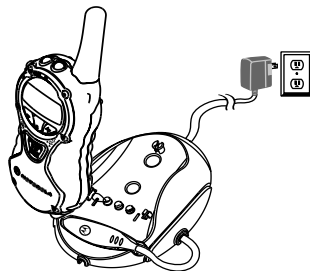
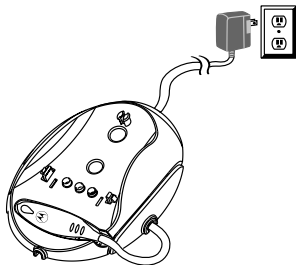
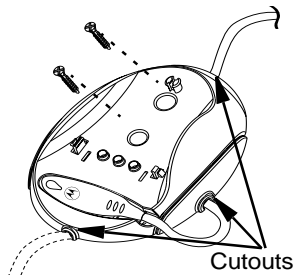
Note: If you notice the LED flashing red for more than a minute while clamping the charger onto the charger adapter cover, the battery is faulty and should be replaced.

- When the LED turns solid green, the battery is fully charged.
- Note:** When charging the battery by itself, remove the charger from the charger adapter cover before installing or removing the battery.



CommPort™ Charging Dock

The CommPort™ charging dock provides drop-in charging convenience. The charging dock can be mounted or placed on any flat surface (such as a wall or workbench) and turns your radio into a stationary intercom while keeping it charged and ready for any adventure.



To mount the charging dock:

- Wrap the power cord under the charging dock. Use the cutouts to hold the cord in place.
- Attach using two #6 x 3/4" screws appropriate for the mounting surface.

- Position the charger with the hook on the LED end over the left slot.
- Snap the hook on the cord end into the right slot, clamping the charger onto the charging dock contacts
- Plug in the charger.

- Place the radio, or the NiMH battery in the charger adapter cover, into the CommPort charging dock.
- When the LED turns solid green, the battery is fully charged.



Charging Status

The LED charger indicates charging status when the charger is connected to the radio, the NiMH battery, or the CommPort™ charging dock.

Color	Charging Status and Description	Charging Level Complete
Solid Red	Rapid charging	Up to 90%
Flashing Green	Top-off charging	90% to 100%
Solid Green	Charging complete	100%
Flashing Red	Battery faulty If flashing red persists for more than one minute, the battery is faulty and should be replaced.	-
Flashing Yellow	Standby Battery waiting to charge. Temperature out of range for charging; must be between 5° to 40° C or 41° to 104° F	-



Basic Operation of Your Radio

Use **[Power]** to --

- Turn power on/off

Use **[MODE]** to --

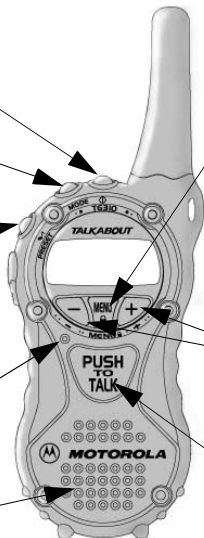
- Scroll through mode selections
- Return to two-way mode (when held down)

Use **[Call Tone]** to --

- Transmit call tone
- Start and stop stopwatch
- Select and scroll through stereo presets (T6310 only)

Microphone

Speaker



Use **[MENU]** to --

- Scroll through menus
- Lock the keypad (when held down and not in a menu)
- Exit the menu (when held down while in a menu)

Use **[Volume Down]** and **[Volume Up]** to --

- Change the volume
- Scroll through and select settings

Use **[Push to Talk]** to --

- Talk on the radio
- Save a setting

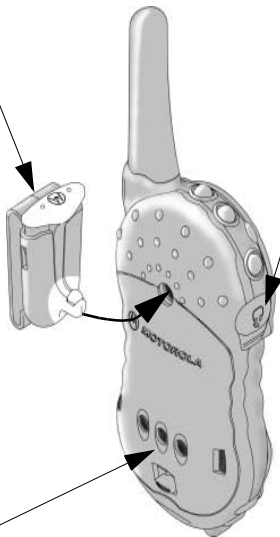


Belt Clip

- Squeeze the top and bottom of the clip to attach or detach the clip from the radio.

Note: The belt clip holds the radio while being worn on your belt. It was designed for your convenience and is not meant to secure your radio under all circumstances.

NiMH Battery Charging Contacts



Accessory Connector (and FM Connector on T6310)

- For audio accessories, such as speaker/microphone and flexible ear receiver.
- FM stereo earbuds (T6310 only) or any standard stereo headset.

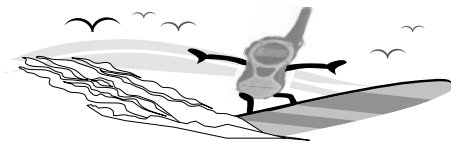
Note: Connector(s) shown with the cover plug in place. Both connectors cannot be used at the same time.

Check out the Accessory Brochure for other cool stuff available from Motorola.

When using audio accessories with your radio, Motorola recommends that the volume level be kept at a comfortable listening level.



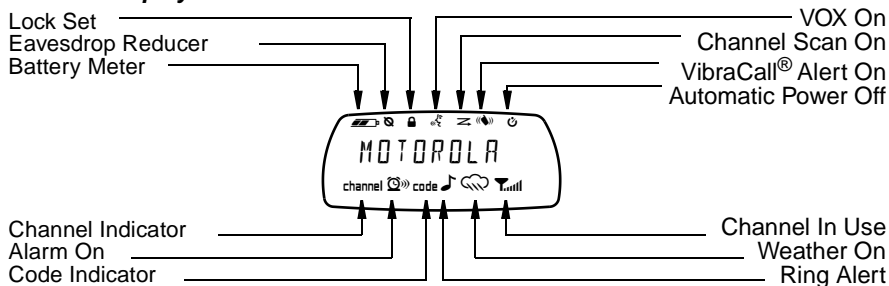
Using your radio is easier than catching a wave!



Turning On Your Radio

Press	To Display	Then
①		
		The radio beeps and ① flashes every three seconds.

Your Radio's Display



Turning Off Your Radio

To turn off your radio, press and hold ① until the radio beeps and the display goes blank.












Modes

Your radio can transmit and receive in all modes except the weather mode. The T6300, T6310, and T6320 standard modes are: *TWO WAY*, *TIME*, *STOPWATCH*, *WEATHER*, and *SETTINGS*.

The T6310 also has an *FMSTEREO* mode. The T6320 has *COMPASS*, *TEMPERAT*, *BAROMETER*, and *ALTIMETER* modes in addition to the standard modes.



Key Sequence

Almost everything you can do with your radio is done using the same basic key sequence! Use your radio's mode and menu screens to select options and set features the way you want them. All the features that work using this key sequence are described on the following pages.

Press	To Display	Then Press
	the mode you want	 to display the associated menus
	the menu you want	 or  to select the menu
 or 	the setting you want	 or wait ten seconds to save the setting or press and hold 



Backlight

Being in the dark is never a problem. Your radio has a backlight that turns on automatically any time you press a button, except  and . The backlight turns out when you're talking on the radio and turns itself off automatically after five seconds.



Talking

Before You Can Talk



*Have you ever tried to talk to someone who's on a "different wavelength?" It's not easy, is it? Well, you can't talk with someone else on your two-way radio unless you **ARE BOTH** on the same channel and using the same interference eliminator code.*

The channel is the radio frequency wave your radio uses to transmit. The interference eliminator code filters out static, noise, and unwanted messages. Refer to the Frequency and Code Charts beginning on page 35 for channel and code choices.


Setting the Channel

Remember that basic key sequence? Use it now!

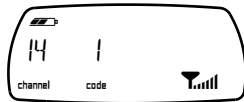
To set the channel, select the **TWO WAY** mode and the **SET CHAN** menu.


Setting the Code

To set the code, select the **TWO WAY** mode and the **SET CODE** menu.

Your radio displays  whenever the channel frequency is in use. Keep scrolling until you get a clear one.

Channel Frequency in Use



Your radio can save a specific code for each channel. Set the channel and code and while operating, press  and then scroll between selected channel and code settings.



Radio Volume

Can we talk yet?



Sure, but you should adjust the volume first. Press or until it's just right. If you want to, sound your call tone by pressing .

To Talk

Press and hold and talk two-to-three inches away from the microphone. When you're finished, just let go. While transmitting, glows red.

Talking Range



Optimal Range

- Flat, open areas from five feet up to two miles



Medium Range

- Buildings or trees



Minimal Range

- Dense foliage or mountains

Using Accessories

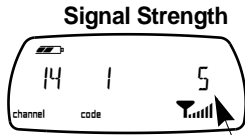
Make sure the radio is turned off before plugging audio accessories into the accessory port. Before you place an accessory on your head or in your ear, turn the volume down. After placing the accessory on your head or in your ear, adjust the volume by pressing to .



Signal Strength Indicator

The signal strength indicator can help you determine when a radio is moving out of range. It is a number displayed when you're receiving on the same channel and code as another transmitting radio and it indicates the relative signal strength of the transmitting radio: 1 is weakest (usually farthest away) and 5 is strongest (usually closest).

Note: Obstacles that block the signal path may affect the signal strength indicator function.



Signal strength indicator

Call Tone and Call Display



Don't you hate it when you miss a call?

I mean it could be someone really important. A call you need to take right away. Or worse, someone you're trying to reach may not know that you've called because their surroundings are too noisy.

Your radio can transmit ten different call tones. To set your call tone, select the **TWO WAY** mode and the **SET CALL** menu. The radio plays a sample of each tone as you scroll through them. To use your call tone, just press **PTT** to transmit it to others.

You can always tell if someone using a T6000-Series radio is trying to reach you when your radio displays the call received screen...





Alerts

You can determine how your radio will alert you when you're receiving: vibrate, ring, or both. Your radio will notify you with your selected alert if 30 seconds have passed since your last transmission or incoming call.

VibraCall®

Your radio features VibraCall®, a vibrating alert to notify you of two-way radio reception in noisy environments.

OFF -- your radio doesn't sound an alert except for the audio reception when receiving.



VIB ON -- your radio vibrates to alert you.



RING-- your radio RINGS your call tone when receiving.

VIB+RING--your radio vibrates and rings your call tone when receiving.

To set VibraCall®, select the **SETTINGS** mode and the **SET VIB** menu.



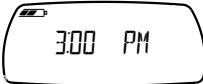



Keeping Time

Your radio has several features to help you keep track of time: stopwatch, alarm, and the clock display can be set as your standby screen.

Setting the Time

Setting the time is easy! Use the basic key sequence to select the *TIME* mode and the *SET TIME* menu, then

Press	To Display	Then Press
 and  to set hours and minutes		 to move between hours and minutes

Setting the Clock Display

To display the clock, select the *TIME* mode and the *SET DISP* menu.

If you choose to display the clock, the time screen becomes your two-way radio's standby screen. It appears whenever the radio is on and nothing else is happening.



Setting the Alarm

To set the time the alarm will sound, select the *TIME* mode and the *ALARM TIME* menu, and set the alarm time the same way you set the clock time.



The alarm volume is the same as the radio volume, so make sure it's loud enough.

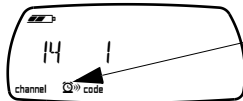
To set the alarm, select the *TIME* mode and the *SET ALARM* menu. Press and to select *ALARM ON* (or *ALARM OFF*).



"I'm all shook up."

Your alarm will now sound your call tone at the set time every day.

Alarm Turned On



Alarm On Indicator

Turning Off the Alarm

When the alarm rings and flashes, turn it off by pressing any button. If you don't turn off the alarm, it rings and flashes every ten seconds for up to one minute.

If your radio is turned off, it turns on automatically at the same time every day when the alarm sounds. And, the radio stays on if you don't turn off the alarm. So turn it off and save your batteries!

On T6310 radios, if the FM stereo is on when the radio is turned off, the FM stereo plays when the alarm sounds and the radio turns on.



Stopwatch

If you're running laps, or just feel like you are, you can use the stopwatch to time yourself.

Press	To Display	Then Press
until STPWATCH appears		to start or stop timing
		to reset stopwatch when it is stopped

Your stopwatch has a lap timer function too. While the stopwatch is running, press to obtain the lap time. Press again to switch back to stopwatch.

Note: If you turn off the radio or take it out of stopwatch mode, the stopwatch time resets.



Hands-Free Use (VOX)



LOOK, NO HANDS!!

Your radio has built-in Voice Operated Transmission (VOX), which allows you to transmit “hands-free” just by talking or using VOX accessories. After VOX has been set and turned on, you can use it anytime you want your hands free for other things.

To set VOX, select the **SETTINGS** mode and the **SET VOX** menu, select **VOX ON**. When **VOX** is set to **ON**, your display shows **☞**.

To turn on VOX, quickly press and release **PUSH TO TALK** and **☞** will begin to flash. Your radio will now transmit every time you talk. Press **PUSH TO TALK** to turn off VOX and return to the regular way of transmitting. The **☞** will stop flashing. To reset VOX use, select **VOX OFF**.

The VOX sensitivity level allows you to compensate for background noise. This minimizes the chance of unintended noises triggering a transmission.

To set the VOX sensitivity level, select the **SETTINGS** mode and the **SET SENS** menu, then select high (**HI**) for quiet environments, medium (**MED**), or low (**LO**) for noisy environments. **VOX MED** is recommended for most situations, although you may need to experiment until you get the right setting.

When you connect a VOX accessory, the radio will automatically set to **VOX ON** and **☞** will begin to flash, indicating that the radio is ready to transmit each time you talk.

When you transmit using a VOX headset, you'll hear yourself talking through the accessory speaker. This feature lets you know VOX is working.




Privacy

Eavesdrop Reducer




Just between you and me, there are many things we need to keep under wraps ...

Your radio has the Eavesdrop Reducer feature, a scramble code that makes your transmissions sound garbled to anyone listening. It doesn't guarantee secrecy, but it adds an extra layer of privacy. Don't forget -- all the radios have to be set to the same scramble code for the transmissions to be clear.

To set the scramble code, select the *TWO WAY* mode and the *SETSCRAM* menu, then select code *SCRM 1*, *SCRM 2* or *SCRM 3*. Your display will now show . To turn scramble code off, select *SCRM OFF*.

Quiet6000™

The Quiet6000™ function helps ensure uninterrupted communication between Motorola Talkabout T6300-series radios - it helps to prevent you from hearing transmissions from anything other than these radios. If you and your companions use only the MotorolaTalkabout T6300-series radios with Quiet6000 on, you'll minimize the chance of being interrupted by others (but they can hear you).

To turn the Quiet6000 function on or off, select the *SETTINGS* mode and the *SETQUIET* menu. All the radios have to be set to *QUIET ON* to avoid interruptions. You need to transmit a call tone before talking, other radios on your channel and code can then receive and transmit until 30 seconds of inactivity occurs which resets the Quiet6000 function.  is displayed in the signal strength area of the two-way mode display to indicate that the Quiet6000 function is on, and it flashes while on a call with another MotorolaTalkabout T6300-series radio.



Weather



You can't change the weather, but you can be prepared for it whenever you take your MotorolaTalkabout T6300, T6310, or T6320 radio with you. That's because it tunes in National Oceanic and Atmospheric Administration (NOAA) Weather Radio broadcasts. You can listen to a weather channel or you can even set your radio to alert you to emergency weather broadcasts.

And because NOAA Weather Radio now broadcasts warning information for all types of hazards, routine broadcasts are interrupted during emergencies for natural and technological warnings, watches, and other critical information.

NOAA has transmitters located throughout the United States that broadcast National Weather Service warnings, watches, forecasts and other hazard information 24 hours a day.

Whenever you are listening to the weather channel, you cannot use your radio for two-way communications. However, a weather alert will notify you while the radio is in other modes and it will override FM Stereo broadcasts (T6310 only).

Turning On the Weather

To turn on weather channel reception, select the *WEATHER* mode and the *SET WEA* menu.

To turn off weather channel reception, select *WEA OFF* or take the radio out of weather mode.



Setting the Weather Channel

Your radio receives six NOAA frequencies. (See the Frequency and Code Charts beginning on page 35 for a complete list.)

After turning on the weather broadcast, select the *WEATHER* mode and the *SET CHAN* menu to select the strongest channel.

Note: As with two-way radio reception, weather channel reception depends upon how close you are to a transmitter. If you're out of range you'll hear static--try another weather channel.



...We interrupt this broadcast to bring you a special bulletin...

Well, almost. You can program your two-way radio to cut in and switch to the weather channel whenever it receives an emergency weather advisory.

Setting the Weather Alert

If you set the weather alert, whenever NOAA transmits an emergency weather broadcast, your radio switches to the selected weather channel when it detects the transmission.

To set weather alerts, select the *WEATHER* mode and the *SET ALERT* menu. When weather alerts are set, ☁ is displayed.

Note: The TalkAbout T6000-series two-way radios are designed to be two-way radios primarily, with the added utility of features such as Weather Alert. The radio uses the same circuitry for both two-way radio and weather alert receptions. Therefore, it is possible to miss a weather alert while you are engaged in two-way communication (either transmitting or receiving). To ensure that you do not miss a weather alert, leave the radio in the Weather Mode.



T6310 Features



Are you cool? Well you will be if you take your Motorola Talkabout T6310 radio with you. It has an FM radio mode, to let you tune in, tune out, and stay cool.

Your radio allows you to search for (seek) FM stations in the local area. It even has a tune feature so you can search for and receive weak or distant stations. You can also program your radio to receive your favorite radio stations by using the preset feature.

The FM stereo reception is only available on the T6310. It comes with stereo earbuds but can use any standard connection stereo headset.

Note: FM reception and battery life are best when using stereo earbuds instead of the radio speaker.

Turning On the FM Radio



Turning on the FM radio is easy. And, don't worry, you can still receive calls. The two-way radio will cut right through the FM reception whenever it receives a call. To use the FM Stereo, select the `FM STEREO` mode and the `SET FM` menu.

If you just want to listen to the radio and you don't want to be interrupted by calls, the `SET2WAY` setting allows you to do just that. This setting is reset when the mode is changed or the power is turned off.

Finding an FM Station

Finding a cool station when you are in a new area is easy with your radio's `SEEK FM` feature. It scans the airwaves for active radio stations, stopping at each one.





To use the seek feature, select the *FM STEREO* mode and the *SEEK FM* menu, then  and  until you find a station you like

Note: Your radio plays each station it finds as it scans.





Tuning Your FM

This feature allows you to change the FM radio station by increments of 0.1 kHz. Unlike *SEEK FM* which scans for strong signals, *TUNE FM* allows you to tune in weak stations.

To use the tune feature, select the *FM STEREO* mode and the *TUNE FM* menu, then  and  until you have a clear signal.

Preset FM Stations

You have eight preset stations. To preset a station, select the *FM STEREO* mode and the *PRESET* menu, then scroll through the presets to the one you want to change. Press  and scroll through the FM stations. When you find the station you want to preset, press .



Later, when you want to play them, press  to scroll through your settings until you reach one you like. Then let go and enjoy!



T6320 Features


CAUTION: The T6320 contains sophisticated electronic measuring components (compass, barometer, and altimeter). These components require calibration and care to function properly. Improper calibration or care will result in inaccurate readings.

Compass

The compass feature is an accurate and instantaneous directional aid. When held horizontally, the direction the radio antenna is pointing is displayed. The compass displays eight cardinal points (N, NE, E, SE, S, SW, W, and NW) and the corresponding numeric compass degrees from north; for example 17°, 26°. Calibrate the compass for first use, after changing batteries, during and after use in a motor vehicle, or after major changes in global position.

Note: The effect of electric accessories and high current devices present in motor vehicles can cause incorrect compass readings. The compass should be recalibrated during and after use in a motor vehicle.




Calibrating the Compass

To calibrate the compass, select the `COMPASS` mode and the `CALIBRAT` menu. Keep the radio level during the calibration procedure. After turning calibration on, hold the radio horizontally and rotate it at least a full circle (360°). Press  or turn calibration off to set the calibration.

Note: Each time you select `CALIB ON`, you must perform the calibration procedure. Selecting `CALIB ON` clears previous calibration settings.




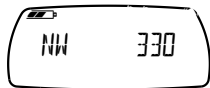
Compass Declination

Compass declination, also called 'variation' in mariners' and aviators' jargon, is the angle between where a compass needle points, referred to as 'magnetic north', and the true north pole. To set the compass declination, select the **COMPASS** mode and the **DECLINAT** menu. You can set the compass declination from magnetic north by pressing the  or  until the desired setting appears, then pressing  to set.

Note: If you notice an incorrect compass reading and your compass has been calibrated, you may need to set the compass declination for your area. Visit www.motorola.com or call Motorola for details on setting compass declination for your area.

Using the Compass

Press  until **COMPASS** appears. Let go and the compass screen displays -- showing the direction and degrees. If --- is displayed instead of degrees from north, recalibrate the compass.





Thermometer

The thermometer feature measures the ambient temperature in the selected unit of measurement (Fahrenheit or Celsius). When moving from environments with moderate temperature differences, wait 20 minutes for the thermometer feature to acclimate. Otherwise, the temperature readings may not display accurately.

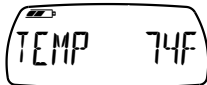
Using the Thermometer Feature

Press  until *TEMPERAT* appears.

The temperature screen displays --

showing the temperature in the selected unit of measurement.



Fahrenheit




Celsius



Setting the Units of Measurement

To set the units of measurement for the thermometer, select the *TEMPERAT* mode and the *SETUNITS* menu. Press  or  until your choice of *FAHRENHT* or *CELSIUS* appears, then press

 to set.



Barometer

The barometer feature measures changes in atmospheric air pressure. Increases in pressure generally indicate stable or improving weather, while decreases in pressure indicate changing or stormy weather.

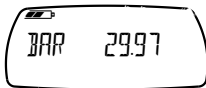
Note: The barometer feature displays the actual barometric pressure at the current altitude. The display has not been corrected to the barometric pressure at sea level.

Using the Barometer

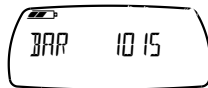
Press  until **BAROMETR** appears.

The barometer screen displays -- showing the atmospheric pressure in the selected unit of measurement.




Inches of Mercury



Millibars



Setting the Units of Measurement


To set the units of measurement for the barometer, select the **BAROMETR** mode and the **SETUNITS** menu. Press  or  until your choice of **INHG**, or **MBAR** appears, then press  to set.

Altimeter



The altimeter feature estimates your altitude based upon atmospheric pressure. You can also use the altimeter to display a relative change in height from one point to another.

Using the Altimeter




Press  until *ALTIMETER* appears.

The altimeter screen displays -- showing the altitude in the selected unit of measurement.








Altitudes measured in feet, display in 20-foot increments; while altitudes measured in meters, display in 5-meter increments

Setting the Units of Measurement

To set the units of measurement for the altimeter, select the *ALTIMETER* mode and the *SETUNITS* menu. Press  or  until your choice of *FEET*, *K FEET* (thousands of feet), *METERS*, or *K METERS* (kilometers) appears then press  to set.

Setting the Altimeter Level

Because the altimeter display is based upon atmospheric pressure, it is only an approximation of altitude above sea level. Therefore, it's important to set the altimeter level to the correct altitude (if you know it) each time you head outdoors. Or, you can set your starting level to  so that the next altimeter display is the change in altitude relative to your starting point.



To set the altimeter level, select the *ALTIMETER* mode and the *SETLEVEL* menu. Press  or  to set the altimeter level to the correct height or press the  button to set the level to .

Advanced Two-Way

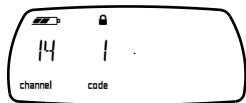
Lock






You can make sure your menu settings won't be changed accidentally.




Just turn on the menu lock by pressing  for three seconds. Now you'll see a  on the display like this--




Locked Screen



Lock only locks  settings. You can turn off the menu lock by pressing  for three seconds again.  disappears from your display when it's turned off.

LockPlus

The LockPlus feature locks all the buttons except ,  and . Meaning that you can only turn the two-way radio on and off and transmit.

Turn on the LockPlus feature by pressing  for six seconds, the display will show a flashing . You can turn off the LockPlus feature by pressing  for six seconds again.





Channel Scanning



*By using **SCAN**, you can monitor channels and codes for transmissions and lock in on the one that interests you. You don't have to set a new channel or code, the radio just resets itself temporarily to that channel and code and you can start talking. However, if no transmissions take place for five seconds, scanning resumes.*

After you turn on **SCAN**, your radio scans channels and codes until it finds an active one and locks on to it. If you do not begin talking or no one else transmits within a short time, it will resume scanning.

If you want to scan channel frequencies without interference eliminator codes, change your code to **0**.

Turning on Channel Scanning

To set channel scanning, select the **TWO WAY** mode and the **SET SCAN** menu. Your channel/code screen displays **↔** and scrolls through channels when scanning is turned on.

Scan List

You can select which channels are to be scanned by putting them in a list. To set your scan list after you turn on **SCAN**, select the **TWO WAY** mode and the **SCANLIST** menu. Your radio displays **IN** or **OUT** and a channel number. Use **←** to change the **IN** or **OUT** setting and **→** to scroll to the next channel. Select **IN** to add the channel to your scan list, if you don't wish to scan a certain channel select **OUT**.




Talk Confirmation Tone



Whenever you turn on the talk confirmation tone feature, your two-way radio transmits a unique tone when you finish transmitting. It's like saying "Roger" or "Over" and lets others know when to begin talking.

To set this feature, select the **SETTINGS** mode and the **SETROGER** menu.


Button Beeps

The button beeps feature allows you to control whether the radio beeps every time you press a button. Turn it off if you want quiet radio operation. To set the button beeps feature, select the **SETTINGS** mode and the **SETBEEPS** menu. To turn off the button beeps feature, select **BEEPSOFF**; to turn on the button beeps feature, select **BEEPS ON**. For a shortcut method of turning off the button beeps feature, press and hold  when turning on the radio.

Call Tones are not heard on the transmitting radio when button beeps are off.

Automatic Power Off

You can program your radio to turn itself off after a certain period of inactivity. This helps save battery life.

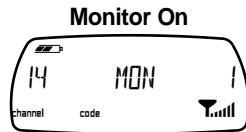
To set the automatic power off feature, select the **SETTINGS** mode and the **SETPWRDWN** menu. Choose the number of hours **HOURS 1 -- 8**, after which, power shuts off. Choose **HOURS --** to turn off the automatic power off feature.  displays on the screen when the automatic power off feature is set.



Monitor

Using the monitor feature helps to improve the reception of your radio if you're frequently almost out of range. It also allows you to listen to a channel frequency without codes (carrier squelch) to tell whether or not it's currently in use. To use the monitor, select the **TWO WAY** mode and the **SET MON** menu.

Your channel and code screen will look like this.
You'll hear static if the channel frequency is unused.
Changing from two-way mode will turn monitor off.



Reset

You can reset your menu settings to the default settings by turning your radio off and then pressing **1**, **PUSH TALK**, and **MENU** at the same time.

Setting the Battery Type

The **SET BATT** feature allows the battery meter to recognize and properly display the power usage for either alkaline or aftermarket rechargeable single-cell nickel cadmium (NiCd) batteries. To set the battery type feature, select the **SETTINGS** mode and then **SET BATT**. Press **←** or **→** until your choice of **ALKALINE** or **RECYCLE** appears, then press **PUSH TALK** to set.

Use and Care



Use a soft cloth moistened with soap and water to clean the exterior.

If the radio gets wet...



Turn it off and remove batteries.



Do not immerse in water.



Do not use alcohol or cleaning solutions.



Dry with soft cloth.



Do not use until completely dry.





Contact Information



Repairs



Warranty



Questions

1-800-353-2729 (U.S.)
1-800-461-4575 (Canada)

1-800-739-7834 (TTY)

On the web, please visit www.motorola.com

Frequency and Code Charts

The charts on these pages provide frequency and code compatibility information. These charts are useful when using Motorola Talkabout two-way radios with other two-way radios.

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



Weather Frequency Chart			
WX1	162.550	WX5	162.450
WX2	162.400	WX6	162.500
WX3	162.475		
WX4	162.425		

Carrier squelch (0) disables interference eliminator codes. This allows you to monitor all activity on the channel you are using.

Interference Eliminator Codes

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

Troubleshooting

No Power	Reposition or replace alkaline batteries. Recharge or replace NiMH battery.
Message not transmitted	Make sure  is completely pressed as you transmit. Reposition, replace, or recharge batteries.
Message not received	Confirm radios have the same channel and interference eliminator code settings. Make sure  is not being pressed. Reposition, replace, or recharge batteries. Quiet6000 feature is on, transmit call tone before talking. Obstructions and operating indoors, or in vehicles, may interfere -- change location.
Hearing other noises or conversation on a channel	Confirm interference eliminator code is set. Shared channel or interference eliminator code may be in use, try another.
Message scrambled	Eavesdrop Reducer scramble code is on or setting doesn't match other radios; all radios must use the same scramble code.

Limited talk range	<p>Steel and/or concrete structures, heavy foliage, use in buildings or vehicles decrease range. Check for clear line of sight to improve transmission.</p> <p>Wearing radio close to body such as in a pocket or on a belt decreases range. Change location of radio.</p>
Heavy static or interference	<p>Radios are too close, they must be at least five feet apart.</p> <p>Radios are too far apart or obstacles interfering with transmission. Talk range is up to two miles in clear, unobstructed conditions.</p>
Channel and/or code locked	Make sure radio is unlocked. See page 29.
Low batteries	Replace alkaline batteries. Recharge or replace NiMH battery. Extreme operating temperatures affect battery life.
Charger LED double flashing	<p>Charger not properly positioned. Reposition charger and ensure it is firmly clamped to the radio, battery, or charging dock.</p> <p>Battery power is very low; battery is charging up slowly before it starts to quick charge.</p>
Cannot activate VOX	Feature not set and on. See page 18.
Poor FM reception	FM stereo use is optimal with use of stereo earbuds.

Motorola Limited Warranty

For Two-Way Family Radios

I. What this Warranty Covers and for How Long

The Motorola company listed below ("Motorola") warrants its Two-Way Family Radios (the "Products") against defects in materials and workmanship under normal use for a period of one year from the date of purchase. This warranty extends to the first end-user purchaser only, and is not transferable.

Motorola, at its option, will at no charge either repair, replace or refund the purchase price of any Products that do not conform with this warranty. Repair may include the replacement of parts with functionally equivalent reconditioned or new parts. Replacement may include providing a functionally equivalent "Motorola Certified Reconditioned" or a new Product. Products that have been repaired or replaced are warranted for the balance of the original warranty period or for 90 days from the date that the repaired or replaced Product is received by you, whichever is longer. All Products for which replacements have been provided will become Motorola's property.

II. Other Warranty Conditions

This warranty is valid only in the United States and Canada, and is Motorola's complete warranty for the Products. Motorola assumes no obligation or liability for changes to this warranty unless made in writing and signed by an officer of Motorola.

Motorola does not warrant any installation, maintenance, or service that it did not perform.

**SERVICE WORK PERFORMED BY SERVICE CENTERS NOT AUTHORIZED BY
MOTOROLA TO PERFORM SUCH WORK WILL VOID THIS WARRANTY.**

III. What This Warranty Does Not Cover

- a. Defects or damage resulting from: use of the Products in any manner not normal or customary; misuse, accident or neglect such as dropping the Products onto hard surfaces, contact with water, rain or extreme humidity, contact with sand, dirt or the like, contact with extreme heat, spills of food or liquid; improper testing, operation, maintenance, installation, adjustment; or any alteration or modification of any kind.
- b. Scratches or other damage to plastic surfaces, cracked displays, or other externally exposed parts caused by use of the Products.
- c. Products disassembled or repaired in such a manner as to adversely affect performance or prevent adequate inspection and testing to verify any warranty claim.
- d. Products on which serial numbers or date tags have been removed, altered or obliterated.

IV. How to Get Warranty Service

To get warranty service, please call:

1-800-353-2729 USA

1-800-461-4575 Canada

You will receive directions on how to mail the Products to Motorola.

All Products shipped to Motorola Service Centers must be shipped with freight and insurance prepaid. Along with the Products you must include a receipt, bill of sale, or some other comparable proof of purchase, a written description of the problem and, most importantly, your address, and telephone number. Products that are repaired or replaced under this warranty will be shipped you at Motorola's expense for the freight and insurance. If additional information is needed, please contact Motorola at the address at the bottom of this document.

V. General Provisions:

THIS IS THE COMPLETE WARRANTY FOR THIS PRODUCT BY MOTOROLA AND SETS FORTH YOUR EXCLUSIVE REMEDIES. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE GIVEN ONLY IF SPECIFICALLY REQUIRED BY APPLICABLE LAW. OTHERWISE, THEY ARE SPECIFICALLY EXCLUDED. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE ACCESSORY, OR FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, TO THE FULL EXTENT THESE DAMAGES MAY BE DISCLAIMED BY LAW.

VI. Patent and Software Provisions

Motorola will defend at its own expense, any suit brought against you to the extent that it is based on a claim that the Products infringe a United States patent. Motorola will pay those costs and damages finally awarded against you in any such suit which is attributable to any such claim. The defense and payments by Motorola are conditioned on the following: (a) that you will notify Motorola promptly in writing any notice of the claim; and (b) that Motorola will have sole control of the defense of the suit and all negotiations for its settlement or compromise; and (c) should the Products become, or in Motorola's opinion be likely to become, the subject of a claim of infringement of a United States patent, that you will permit Motorola, at its option and expense, either: to procure for you the right to continue using the Products or parts; to replace or modify them so that they become non-infringing; or to grant you a credit for such Products or parts as depreciated and accept their return. The depreciation will be an equal amount per year over the lifetime of the Products, accessories,

battery or parts as established by Motorola.

Motorola will have no liability to you with respect to any claim of patent infringement which is based upon the combination of the Products or parts furnished under this limited warranty with software, apparatus or devices not furnished by Motorola. Motorola will have no liability for the use of ancillary or peripheral equipment or software not furnished by Motorola which is attached to or used in connection with the Products. The foregoing states the entire liability of Motorola with respect to infringement of patents by the Products, accessories, batteries or any parts of them.

Laws in the United States and other countries preserve for Motorola certain exclusive rights for copyrighted Motorola software such as the exclusive rights to reproduce in copies and distribute copies of the Motorola software. Motorola software may be copied into, used in and redistributed with only the Products associated with such Motorola software. No other use, including without limitation disassembly, of such Motorola software or exercise of exclusive rights in such Motorola software is permitted.

VII. State and Jurisdiction Law Rights

Some states and jurisdictions do not allow the limitation or exclusion of incidental or consequential damages, 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 which vary from state to state or from one jurisdiction to another.

Motorola:

In the USA:

Motorola, Inc.
600 North U.S. Highway 45
Libertyville, IL 60048

In Canada:

Motorola Canada Limited
5875 Whittle Road
Mississauga, ON L4Z 2H4

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.

FCC License Not Required

Changes or modifications not expressly approved by Motorola may void the user's authority granted by the FCC to operate this radio and should not be made. To comply with FCC 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 equipment authorization for this radio could violate FCC rules.

Patent Notice

This product is covered by one or more of the following United States patents.

5896277 5894292 5864752 5699006 5742484 D408396 D399821 D387758 D389158

5894592 5893027 5789098 5734975 5861850 D395882 D383745 D389827 D389139

5929825 5926514 5953640 6071640 D413022 D416252 D416893

Export Law Assurances

This product is controlled under the export regulations of the United States of America and Canada. The governments of the United States and Canada may restrict exportation and re-exportation of this product to certain destinations. For further information, contact the U.S. Department of Commerce or the Canadian Department of Foreign Affairs and International Trade.



Motorola, the Stylized M Logo, and all other trademarks indicated as such herein are trademarks of Motorola, Inc.

® Reg. U.S. Pat. & Tm. Off.

© 2000 Motorola, Inc. All rights reserved. Printed in the U.S.A.

Consumer Products Division
1125 Satellite Road, Suite 101
Suwanee, GA 30024-2880

www.motorola.com
















6880907Z94-A









Motorola Talkabout™ T6300-Series Radio

Quick Reference Card

Icons your radio displays:

- | | | | |
|--|--------------------|---|---------------------|
|  | Battery meter |  | Alarm on |
|  | Eavesdrop |  | One of 38 codes |
| | Reducer on |  | Ring alert |
|  | Lock set |  | Weather on |
|  | VOX on |  | Channel in use |
|  | Channel scan on |  | Automatic power off |
|  | VibraCall® on |  | Quiet6000™ |
| channel | One of 14 channels | | |

Buttons on your radio

- | | | | |
|---|---|---|--|
|  | • Turn power on/off |  | • Talk on the radio |
|  | • Scroll through mode selections |  | • Save a setting |
| | • Return to two-way mode (when held down while in a menu) |  | • Scroll through menus |
|  | • Transmit call tone | | • Lock the keypad (when held down and not in a menu) |
| | • Start and stop stopwatch |  | • Change the volume |
| | • Select and scroll through stereo presets (T6310) | or | • Scroll through and select settings |
| | |  | |

Standard Features

All T6300-Series Radios

Modes	TWO WAY	TIME	STPWATCH	WEATHER	SETTINGS
Menus	SET CHAN	SET TIME		SET WEAR	SETQUIET
	SET CODE	SETALARM		SET CHAN	SET VID
	SETSCRAM	ALARMIME		SETALERT	SETROGER
	SET CALL	SET DISP			SETWPN
	SET MON				SETDEEPS
	SET SCAN				SET VOX
	SCANLIST				SET SENS
					SET BATT

Optional Features

	T6310 only	T6320 only			
Modes	FMSTEREO	COMPASS	TEMPERAT	BAROMETR	ALTIMETR
Menus	SET FM	CALIBRAT	SETUNITS	SETUNITS	SETUNITS
	PRESET	DECLINAT			SETLEVEL
	SEEK FM				
	TUNE FM				
	SET 2WAY				