GME

INNOVATIVE ELECTRONICS

TX6200

80 CHANNEL

UHF HANDHELD CB RADIO

INSTRUCTION MANUAL

CONTENTS

WARNING

The TX6200 is a radio transmitting device.

- When transmitting, keep the antenna more than 25 mm from any part of the head or body.
- Do not transmit near electrical blasting equipment or in explosive atmospheres.
- Do not allow children to operate a radio transmitter unsupervised.

INTRODUCTION

The UHF Citizens Band Radio Service (CBRS) was set up to provide a simple yet reliable form of radio communication for business, farming or private use. A CB radio license is not required.

Your TX6200 operates in the UHF (Ultra High Frequency) 477 MHz band and offers a much higher grade service than 26/27 MHz systems. In addition, by using FM (frequency modulation) voice quality is improved while electrical interference is virtually eliminated.

The range of a UHF FM signal is usually considered 'line-of-sight', but this can be greatly increased by the liberal use of repeaters. Repeaters are special transceivers (transmitter/receivers) installed in high locations. Their job is to automatically retransmit any signals they receive, thereby extending the range of the original signal. Generally the range of your UHF radio will vary according to your location and the height of your antenna. UHF signals are easily blocked by hills or large buildings so you won't get as much range in a valley or built-up city areas as you will from a hill or in open country. If you are having trouble contacting someone, try moving to an open space or a higher location. Typical portable range is around 3 to 5 km depending on the terrain. Moving to a higher location could extend the range to 30 km or more. Once again, the use of repeaters can increase these ranges considerably (up to 100 km or so).

IMPORTANT INFORMATION CONCERNING UHF CB RADIO

The use of the citizen band radio service is licensed in Australia by the ACMA Radiocommunications (Citizens Band Radio Stations) Class License and in New Zealand by the Ministry of Economic Development New Zealand (MED). A General User Radio License for Citizens band Radio, and operation is subject to conditions contained in those licenses.

As of the 1 January 2011 there have been some amendments to the class licence for users and equipment operating in the CB/PRS 477MHz band.

In simple terms the same amount of spectrum is available, however, radio transceivers can now operate in a narrower bandwidth and hence use less spectrum. These radios are generally referred to as narrowband or 12.5 KHz radios. By using 12.5 kHz channel spacing instead of 25 kHz, the 40 channels originally allocated can now be expanded to 80 channels thereby doubling the channel capacity and relieving congestion in the UHF CB/PRS band.

Orignal 40 channel wideband radios will not become obsolete and will continue to operate on the original 40 channels, however they will not be able to converse on the newer channels 41 – 80*. The newer narrowband radios will be able to converse with all older 40 channel wideband radios on all channels 1 to 40 and the newer channels allocated between 41 to 80*.

The mixing of narrowband and wideband radios in the same spectrum can however cause some possible operating issues of interference and varying levels of received volume.

Possible issues

When a new narrowband radio receives a transmission from an older wideband radio the speech may sound loud and distorted - simply adjust your radio volume for best performance.

When an older wideband radio receives a signal from a new narrowband radio, the speech may sound quiet - simply adjust your radio volume for best performance.

Depending on how close your receiving radio is to another transmitting radio, there can be interference from the transmitting radio if it is using a channel adjacent to the channel you are listening to. Simply try going up or down a few channels from the currently selected channel.

The above situations are not a fault of the radio but a symptom of operating wideband and narrowband radios in the same bandwidth. This possible interference will decrease over time as the population of wideband radios ages and decreases.

Further information and updates are available from the Australian Communications and Media Authority (ACMA) at www.acma.gov.au and the Ministry of Economic Development (MED), Radio Spectrum Management at http://www.rsm.govt.nz

EMERGENCY CHANNELS

The ACMA has allocated channels 5/35 for emergency use only. Channel 5 is the primary Simplex Emergency Channel. Where a Channel 5 repeater is available, you should select Duplex on CH 5.

NOTE: Channel 35 is the input channel for the Channel 5 repeater therefore Channel 35 should also not be used for anything other than emergency transmissions Channels.

TELEMETRY CHANNELS

ACMA regulations have allocated channels 22 and 23 for telemetry only applications and have prohibited the transmission of speech on these channels. Consequently the TX3420 has a transmit inhibit applied to channels 22 and 23.

In the event additional telemetry/ telecommunication channels are approved by the ACMA, these channels shall be added to those currently listed where voice transmission is inhibited.

- **Microprocessor Controlled Frequency Synthesiser:** Allows user programmable control of scanning, selcall, CTCSS, channel memories, user selectable frequencies and selected feature options.
- **Permanent Memory:** Retains all user settings in non-volatile memory even when the power source is removed.
- **Programmable Scan Function:** Scans up to 40 UHF CB channels and up to 20 user programmable frequencies with both Group and Open Scan functions available.
- **In-Built CTCSS:** User selectable Continuous Tone Coded Squelch System provides quiet channel operation (can be enabled or disabled on individual channels).
- **In-Built Selcall:** Selective Calling of individuals or groups with four or five digit ANI and fully user adjustable 5-tone transmitted Selcall Ident. Also allows alphanumeric naming of up to 10 Idents for easier caller identification.
- **Individually Programmable Duplex Function:** User selectable only for those individual channels in your area that have repeaters, leaving the others free for use as extra simplex channels.
- **Priority Channel:** A user programmable priority channel feature allows your working or local repeater channel to be instantly recalled at the press of a key.
- **80 Channels:** Now expanded to 80 channels using the new narrowband specification.
- **High Contrast Liquid Crystal Display**: Fully detailed LCD provides a visual indication of the selected channel and all selected functions at a glance. LED backlit for night viewing with automatic timeout.
- **Quiet Mode:** Selectable on individual channels, the Quiet mode prevents incoming signals from being heard on selected channels unless preceded by your Selcall code.
- **Feature Disabling:** Features such as Scanning, Squelch, Duplex, Priority, Channel Selection and CTCSS can be disabled by your dealer to make the radio simpler to operate.
- **Digital Signal Strength Meter:** Provides a numeric signal strength indication in numbers from 0 to 9+.
- **Heavy Duty 7.2 Volt 1200 mAh Ni-MH Battery Pack:** Heavy Duty rechargeable Ni-MH battery pack supplied as standard.
- **Advanced Power Saving Feature:** Allows the TX6200 to 'sleep' during periods of inactivity to conserve battery power.
- **Designed and manufactured in Australia:** Using the very latest in ultra miniature Surface Mount technology and reflow soldering techniques for unsurpassed quality and reliability.

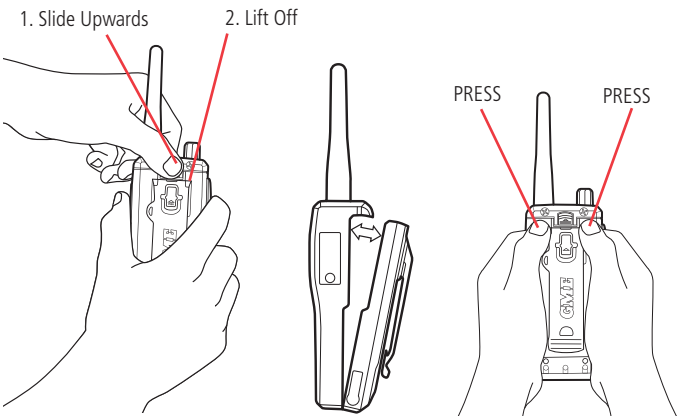
Your TX6200 is supplied with a 7.2 Volt 1200 mAh Ni-MH rechargeable battery pack.

When the battery is new, it must be fully charged before being used for the first time.

If left unused your TX6200's battery pack will discharge itself within a few months. If you have not used your TX6200 for some time, you will need to recharge the battery pack before use.

The battery pack is a sealed unit. There are no user serviceable parts inside.

WARNING: Use only GME approved battery packs and chargers. The use of other types may be dangerous and will void the warranty.



To Remove Battery Pack

To Refit Battery Pack

Removing the battery pack

The battery pack is a self contained unit which can be removed from the radio as follows:

1. Hold the radio face down in one hand.
2. With the thumb of one hand, push the locking tab upwards towards the top of the radio while swinging the top half of the battery pack away from the radio with the other hand.
3. Once clear of the locking tab, lift the battery upwards away from the radio. The base of the battery pack is retained in a slot in the metal frame at the base of the radio.

Re-fitting the battery pack

1. Carefully position the tongue in the base of the battery pack into the slot in the metal frame at the base of the radio.
2. Swing the top half of the battery pack into place against the radio.
3. Using both thumbs (one each side of the belt clip) press the top half of the battery firmly onto the radio until the locking tab clicks downward locking the battery pack into place.

Charging the battery pack

Your TX6200 is supplied with a BCD001 rapid charger and a PS001 AC adaptor. The rapid charger will recharge the battery pack in around 1 hour.

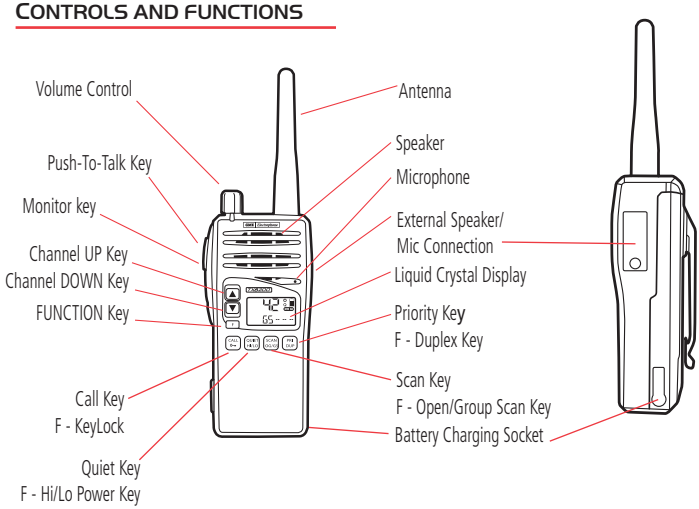
To charge the battery:

1. Plug the PS001 AC adaptor into a standard 240 Volt outlet
2. Plug the lead from the PS001 into the charging socket on the rear of the BCD001 radio charger.

For further information on charging your battery and tips on conserving battery power, see section on 'Maintaining Your Battery Pack' on page 29.

DO NOT CONNECT YOUR VEHICLE'S BATTERY (13.8 VOLTS) DIRECTLY TO THE CHARGING SOCKET AS DAMAGE TO THE RADIO AND BATTERY PACK WILL RESULT WHICH WILL VOID THE WARRANTY.

CONTROLS AND FUNCTIONS



DUPLEX OPERATION

Rotate the volume control clockwise past the 'click' to turn the TX6200 on. Rotate the control fully counter clockwise past the click to turn the radio off.

ADJUSTING THE RECEIVER VOLUME

While receiving a signal, rotate the volume control to achieve a comfortable listening level.

If there are no signals present, press the Monitor key briefly to open the squelch, then adjust the volume while listening to the receiver's background noise. When finished, briefly press the Monitor key again to return the receiver to the quiet state.

NOTE: The minimum setting of the volume control has been factory preset so that, even with the volume turned right down, you can still safely listen to an incoming signal with your ear against the speaker (telephone style).

FUNCTION KEY

The **F** (Function) key is used to access the functions marked in Red on the four keys below the LCD. To select a function, briefly press the **F** key ('F' will be displayed) then press the key labelled with the required function. If no key is selected within 10 seconds, the radio will return to normal operation.

SQUELCH

The Squelch is used to eliminate any annoying background noise when there are no signals present. The TX6200 features a preset Squelch system. The Squelch level has been preset to provide optimum performance in most situations.

The Squelch can be opened or closed with the Monitor key. When the Squelch is open the receiver's background noise can be heard, the BUSY Icon is displayed and the Indicator LED glows GREEN. When the Squelch is closed, the radio remains quiet when there are no signals present but any incoming signals will override the Squelch and be heard in the speaker.

To open the Squelch, briefly press the Monitor key. A low beep will be heard. If there are no signals present you will hear the receiver's background noise.

To close the Squelch, briefly press the Monitor key again. A high beep will be heard and the receiver will become quiet.

NOTE: If an incoming signal is very weak and is close to the minimum Squelch level, it may become broken or 'chopped' by the Squelch action. To prevent this, simply open the Squelch using the Monitor key to allow the signal to be heard clearly. Alternatively, if this is a regular occurrence, you can adjust the preset Squelch sensitivity as described under 'Menu Functions' later in this manual.

SELECTING CHANNELS

To change channels, briefly press the ▲ key to step up one channel or the ▼ key to step down one channel. Holding either ▲ or ▼ will cause the radio to step through the channels automatically at a faster rate.

Duplex switch

Duplex operation allows the TX6200 to transmit on a different frequency to that which it receives. This allows operation through any repeater stations in your area. Repeaters automatically re-transmit your signal over a wider area, providing greatly increased range.

The Duplex function operates only on channels 1 – 8 or 41 – 48. When Duplex is selected on one of these channels, the TX6200 receives on that channel but actually transmits 30 channels higher.

See the table below.

e.g. The TX6200 allows you to select duplex operation on individual channels. This is particularly useful in country areas where there may only be one or two repeaters. The unused repeater channels can then be used for normal simplex or direct radio-to-radio communications.

To select Duplex on individual channels

1. Select the required channel 1 – 8 or 41 – 48.
2. Briefly press the **F** key followed immediately by the **DUP** key. **'DUP'** will appear on the display accompanied by a high beep.

To remove Duplex from a channel

1. Select the required channel 1 – 8 or 41 – 48. **'DUP'** will be visible on the display.
2. Briefly press the **F** key followed immediately by the **DUP** key. **'DUP'** will disappear from the display accompanied by a low beep.

PRIORITY CHANNEL

The Priority channel feature allows you to store one of the 80 CB or 'receive-only' channels in the TX6200 as a priority channel that can be instantly recalled at the press of a key. This can be used to provide instant access to your working channel, your local repeater channel or your favourite 'receive-only' channel.

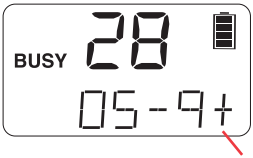
To store the Priority channel:

1. Select the required channel.
2. Press and hold the **PRI** key. The channel number will flash for a moment then a high beep will be heard as the selected channel is stored.

To recall the Priority channel:

1. Briefly press the **PRI** key. The TX6200 will immediately switch to the Priority channel accompanied by a high beep.

Channel Selected	1	2	3	4	5*	6	7	8	41	42	43	44	45	46	47	48
Receive Channel	1	2	3	4	5*	6	7	8	41	42	43	44	45	46	47	48
Transmit Channel	31	32	33	34	35*	36	37	38	71	72	73	74	75	76	77	78



Signal Meter

SIGNAL STRENGTH METER

The TX6200 has a digital signal strength meter that is displayed on the LCD. When in the normal receive mode (scan not selected) the received signal strength is displayed as numbers from 0 to 9+ (with 9+ being the strongest) on the lower right of the display.

KEYLOCK FEATURE

The O-- key locks the keys to prevent unintentional key presses from altering your TX6200's settings. While the keys are locked, only the Push-To-Talk switch, on/off Volume control, Keylock key and Monitor key will continue to function.

To lock the keys, briefly press the **F** key then press and hold the O-- key until a high beep is heard. The O-- symbol will appear on the display.

To unlock the keys and restore them to normal operation, briefly press the **F** key then press and hold the O-- key until a low beep is heard. The O-- symbol will disappear from the display.

THE HI/LO POWER KEY

The **HI/LO** power key is used to change the output power of the transmitter from its maximum level of 5 Watts down to 1 Watt. There are a number of reasons why you might want to use low transmitter power, but the main reason would probably be to conserve battery power. If you need to get the maximum use between charges and you spend a fair proportion of the time transmitting on the radio, then selecting low power can increase battery life quite dramatically. Obviously, you must also be in close proximity to the other radios or the nearby repeater otherwise your lower powered signal may not get through.

To change the transmitter output power setting:

Briefly press the **F** key followed by the **HI/LO** key. A high beep will indicate High power mode is selected. A Low beep accompanied by 'LO' on the display indicates Low power is set.

TRANSMITTING

Before transmitting, check to see if the channel is already in use ('BUSY' will be displayed and the LED on the top of the radio will be green). If the channel is busy, you should wait until it is clear before transmitting.

To transmit, press the Push-To-Talk (PTT) switch on the left-hand side of the radio. Hold the radio about 5 – 8 cms from your face with the antenna vertical and speak into the built-in microphone located just below the speaker. When talking, speak at a normal voice level. The microphone is quite sensitive so it is not necessary to raise your voice or shout.

RECEIVING

NOTE: Your radio may be programmed with options that could affect the way your radio behaves when it receives a call from another radio.

Normal reception

Your radio will normally be muted (squelched) so that it is quiet when there are no signals. When a transmission is received, the radio will automatically unmute itself to allow you to hear the call.

The BUSY Indicator

Whenever the channel is active, the BUSY indicator will appear on the display and the green LED on the top of the radio will light. However, depending on the muting options selected on your radio, you may not always hear any sound from the speaker. This can happen when others are sharing the channel but their calls are not meant for you. For this reason it is important that you visually check that the channel is not busy before making a call to ensure you do not accidentally talk over someone else.

SCANNING

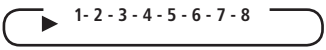
OVERVIEW

The TX6200 is provided with a SCAN function to allow groups of user programmable channels to be scanned for signals. Channels can be scanned at up to 25 channels per second. When a signal is found, scanning will pause on that channel to allow the signal to be heard, then resume scanning when the channel is clear again.

SCAN GROUPS

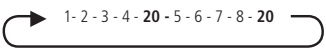
The TX6200 features two scan groups - Open Scan and Group Scan.

Open Scan allows any of the channels to be scanned for activity in an ascending sequence (i.e. from the lowest channel to the highest). If a busy channel is found, scanning will pause to allow the signal to be heard. Once the channel has been clear for 5 seconds, scanning will resume automatically.



Example: Scanning channels 1 – 8 in open scan

Group Scan also allows any of the channels to be scanned for activity in an ascending sequence, but in addition, it also inserts your Priority channel into the scan sequence. This means that your Priority channel will be monitored regularly while scanning to ensure that no calls are missed. Any signals received on your Priority channel will have priority over any signals received on the other channels.

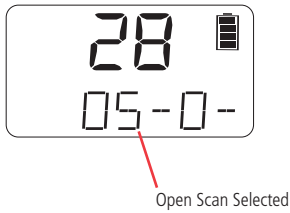


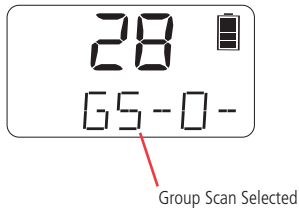
Example: Scanning channels 1 – 8 with Priority Channel 20 in Group Scan

SELECTING A SCAN GROUP

The current scan group is shown on the display as 'OS' for Open Scan or 'GS' for Group Scan.

To change the selected scan group, briefly press the **F** key followed immediately by the **OS/GS** key. A beep will be heard and the display will change to reflect the scan group you have selected.





PROGRAMMING SCAN CHANNELS

Your TX6200 is supplied with all 80 UHF CB channels programmed into the Open Scan memory. Any channels not needed can be removed if required.
The Group Scan memory is empty by default and you will need to add channels to it before use.

To add or remove channels from either scan memory:

1. Check that the radio is not already scanning. If it is, briefly press the **SCAN** key to cancel the scan function.
2. Select the required scan group by pressing the **F** key followed

immediately by the **OS/GS** key. A beep will be heard and the display will change to reflect the scan group you have selected.

3. Select the required channel by pressing the ▲ or ▼ channel selector keys.

- If 'M' is visible to the right of the channel number, the selected channel is already in the scan memory. It can be removed by holding the **SCAN** key in for a few seconds until a low beep is heard. 'M' will then disappear indicating the channel is no longer in memory.

- If 'M' is not visible, then the selected channel is not in the memory. To add it, hold the SCAN key in for a few seconds until a high beep is heard. 'M' will now appear.

4. Repeat step 3 to add or remove other channels in the scan memory.

TO START SCANNING

To scan in the selected scan mode, briefly press the **SCAN** key. A high beep will be heard, 'SCAN' will appear in the display and the radio will begin scanning.

NOTE: If there is only one channel programmed into the Open Scan memory or none in the Group Scan memory, a long low beep will be heard when you press the **SCAN** key and the command will be ignored.

TIP: Even though the TX6200 scans at up to 25 channels per second, the display will appear to be scanning at a slower rate. This is normal. The display is only simulating the effect of scanning since the display of individual channel numbers at the actual scanning speed would blurr together and become unreadable.

SCANNING IN THE OPEN SCAN MODE

- If a busy channel is found, scanning will pause on that channel to allow the signal to be heard and will remain there for as long as the channel remains busy. Once the channel has been clear for 5 seconds, scanning will resume automatically.

- If your radio pauses on a busy channel and you don't wish to listen to that conversation, briefly press the ▲ or ▼ channel selector key. The radio will skip over that channel and resume scanning from the next channel in the sequence.

- If your radio is paused on a busy channel and you wish to remain there, briefly press the **SCAN** key. The radio will exit the Scan mode and remain on the busy channel.

- To transmit while paused on a busy channel, simply press the Push-To-Talk (PTT) switch. The SCAN mode will be put on hold and the radio will stay on that channel. You can now converse on that channel in the usual way. When you have finished your conversation, briefly press the ▲ or ▼ channel selector key to resume scanning.

- If your radio is scanning and you need to use your Priority channel (for an urgent call or an emergency), briefly press the **PRI** key. The Scan mode will be cancelled and the radio will jump straight to the Priority channel.

NOTE: In the Open Scan mode your TX6200 will not allow you to transmit while it is scanning. If the PTT switch is pressed while scanning, the radio will give a low beep and will ignore the command. Your radio will only transmit while it is paused on a busy channel.

ENDING THE SCAN

To stop scanning, briefly press the **SCAN** key. A low beep will be heard and **'SCAN'** will disappear from the display. As long as the radio was not on a busy channel, it will return to the last channel you selected, otherwise it will stay on the busy channel.

USING THE GROUP SCAN MODE

Group Scan allows you to transmit and receive normally on your priority (working) channel, but between breaks in the conversation, the TX6200 will scan and listen to several other channels. The receiver will continue to scan the other channels **ONLY WHILE THERE ARE NO SIGNALS ON THE PRIORITY CHANNEL.**

If a signal appears on the priority channel it will override any signals being received on any of the other channels. In addition, if you press the Push-To-Talk switch at any time, the radio will transmit on the priority channel in the usual way.

SETTING UP THE GROUP SCAN

To setup your radio for Group Scan:

1. Select the Group Scan mode by pressing the **F** key followed immediately by the **OS/GS** key. 'GS' is displayed.
2. Program your Priority channel memory with your preferred working channel.
3. Program the required 'other' channels into your Group Scan memory.

SCANNING IN THE GROUP SCAN MODE

To scan in the Group Scan mode, briefly press the **SCAN** key. A high beep will be heard, 'SCAN' will appear in the display and the radio will begin scanning.

NOTE: If there are no channels programmed in the Group Scan memory when you press the SCAN key, a low beep will be heard and the command will be ignored.

When scanning, the TX6200 scans all the channels programmed into the Group Scan memory, with the priority channel being scanned after every fourth channel (dealer programmable option, if you require different timing for your priority channel, please contact your dealer).

- If your radio pauses on a busy channel and you don't wish to listen to that conversation, briefly press the ▲ or ▼ channel selector key. The radio will skip over that channel and resume scanning from the next channel in the sequence.
- If a signal is heard on a scanned channel, scanning will pause on that channel and remain there for as long as the channel is busy, and for 5 seconds after the channel has cleared, as long as there are no signals on the priority channel. During this time the receiver will continue to check the priority channel for signals every 2 seconds, resulting in a series of small 'breaks' in the reception of the 'paused' channel. If no signals are heard after 5 seconds, the radio will resume scanning.
- If a signal appears on the priority channel at any time (even when paused on a scan channel) the receiver will switch straight to the priority channel and will stay there for as long as the channel is busy. During this time you can transmit on the priority channel in the usual way. Once there has been no activity on the priority channel for 5 seconds, the radio will resume scanning the other channels.
- To transmit on a non-priority channel, exit the scan mode, select the required channel then talk in the usual way. To resume scanning press the **SCAN** key.
- To transmit on the priority (working) channel AT ANY TIME, simply press the Push-To-Talk switch while the radio is scanning. The radio will switch straight to the priority channel. When you have finished your conversation and there has been no further activity on the priority channel for 5 seconds, the radio will resume scanning the other channels.
- To go directly to the Priority channel, briefly press the **PRI** key. The radio will exit the Scan mode.

ENDING THE SCAN

To cancel the Group Scan mode, briefly press the **SCAN** key. A low beep will be heard and **'SCAN'** will disappear from the display. The radio will return to the priority channel.

USING THE GROUP SCAN AS A SECOND OPEN SCAN

There may be applications where you have no need for the priority channel and would prefer to have two Open Scan modes with separate channel groups in each. This would allow you to scan either channel group without the interruption caused by monitoring a priority channel.

Your TX6200 can be Dealer programmed to convert the Group Scan function into a second Open Scan mode. If you would prefer this feature over the present Group Scan option you should contact your GME Dealer to arrange for this feature to be enabled.

When the second Open Scan mode is enabled, the original Open Scan mode becomes Scan 1 while the new additional Open Scan mode becomes Scan 2. To select the required scan mode briefly press the **F** key immediately followed by the **OS/GS** key. 'OS' is displayed for Scan 1 and 'GS' for Scan 2.

The two Open Scan modes are identical in operation. To program and operate each Open Scan mode refer to the section earlier on 'Open Scan.'

NOTE: Enabling or disabling the second Open Scan mode is not a user selectable option. Once enabled by your Dealer, the additional Open Scan mode becomes a permanent part of the TX6200's features and replaces the standard Group Scan function. If you find later that you need the Group Scan function re-enabled, you will need to return your TX6200 to your Dealer.

SELECTIVE CALLING

WHAT IS SELCALL

Your TX6200 has a Selective Calling (Selcall) system that operates like a telephone. Your radio is pre-programmed with its own unique Selcall Identification number. If this number is called by another radio, your TX6200 will beep to alert you.

If you do not want to hear any other activity while waiting on a channel, you can push the QUIET key. The radio will then remain quiet to all incoming signals until your Selcall number is called. The TX6200 will allow you to store up to ten of your most frequently called numbers in memory and each number can be labelled with a 5-letter name for easy identification.

Selcall Identification number (IDENT)

Your TX6200 is factory programmed with its own unique Selcall Identification Number (Ident). This number identifies your radio from others in your area. You will need to make your Ident known to anyone who may need to call you with Selcall. Whenever your TX6200 hears a Selcall signal, it compares the incoming Ident with its own. If the two Idents match, the radio knows it is being called and sounds an alarm to alert you to the call.

The Selcall Ident of your radio is displayed on the bottom right of the LCD for a few seconds when you first turn your radio on.

NOTE: Although your radio's Selcall Ident is pre-programmed at the factory, you can arrange to have your Dealer change it if required.

SELCALL IDENT NAMES

The TX6200 allows you to add a 5 character name to all 10 Selcall Idents stored in memory. The name can then be stored in memory with the Ident making it easier to identify whose Ident you are recalling from the memory. In addition, if an incoming Selcall matches one of the Idents stored in the memory, its name can be displayed to make it easier for you to identify the caller.

THE QUIET MODE (Q)

Your TX6200 can be set to listen on a busy channel but not allow any sound to be heard UNLESS it receives its own Selcall Ident. In this way, your radio can monitor a busy channel without disturbing you, but still let you know when you are being called.

When a signal containing your Selcall Ident is received, the QUIET mode is deactivated and an alarm sounds to alert you to the call. You can then converse normally on the channel.

NOTE: The QUIET mode overrides the normal Squelch system to ensure that the radio remains quiet even when the channel is busy. When QUIET is set, you may see the 'BUSY' icon and signal strengths appear on the display indicating the channel is being used. However, unless someone transmits your Selcall Ident, nothing will be heard in the speaker.

The QUIET mode can be set to work on specific channels i.e. some channels can be set to remain Quiet while others can remain Open to all incoming signals.

TIP: Setting the QUIET mode is not mandatory. You can still use Selcall on any channel whether the QUIET mode is set or not.

SELCALL MEMORIES

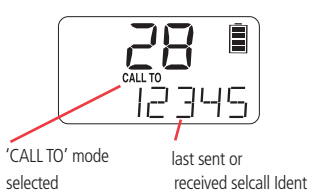
Your TX6200 is fitted with 10 Selcall Ident memories which can be used to store frequently used Selcall Idents. There is also an additional 'CALL' memory which holds the Ident you last sent or received. The memories can be viewed by briefly pressing the call key. The initial memory displayed is the 'CALL' memory. Pressing the ▲ or ▼ channel selection keys will step through the other 10 Selcall storage memories in sequence.

ENTERING, STORING AND SENDING SELCALLS

Enter and send a Selcall

Use the following procedure to enter and send a Selcall.

1. Press the CALL key. 'CALL TO' is displayed, along with the last sent or received Selcall Ident.



NOTE: Before continuing, ensure the radio is in the Ident mode. Idents cannot be entered if the radio is in Alpha mode. To toggle between Alpha mode and Ident mode, briefly press the Monitor key. A high beep indicates Alpha mode is selected while a low beep means the Ident mode is selected.

2. Enter the required Selcall Ident as follows:

   (a) Briefly press the **F** key. The right-hand digit of the Selcall Ident will flash.

   (b) Press the ▲ or ▼ channel keys to select the required number in the flashing digit position.

   (c) Briefly press the **F** key again to select the next digit position.

   (d) Repeat steps (b) and (c) to enter all 5 digits as required.

3. Now press and hold the **CALL** key to send the Ident.

CALL ACKNOWLEDGE

If your Selcall transmission is successful, the radio you called should respond with a 'call acknowledge' signal – usually two quick beeps. This will confirm to you that the radio you called is now alerting its user to your signal.

STORING SELCALL IDENTS

Your TX6200 is fitted with 10 user programmable Selcall Ident memories, allowing you to store up to 10 frequently used Selcall Idents. The memories are accessed by pressing the **CALL** key then pressing the ▲ or ▼ channel keys. Ident memories are labelled c0 to c9.

To Store a Selcall Ident in memory

1. Press the **CALL** key to select the 'CALL TO' mode. 'CALL TO' is displayed along with the last sent or received Selcall Ident.

2. Press the ▲ or ▼ channel keys to select the Ident memory that you wish to programme (locations c0 to c9).

TIP: If the radio displays letters instead of numbers in the Selcall Ident position, your radio is in ALPHA mode. To switch back to Ident mode, briefly press the Monitor key. A low beep should be heard indicating Ident mode is now selected.

3. With the required memory location displayed, enter the Selcall ident as follows:

   (a) Briefly press the **F** key. The right-hand digit of the Selcall Ident will flash.

   (b) Press the ▲ or ▼ channel key to select the required number in the flashing digit position.

   (c) Briefly press the **F** key again to select the next digit position.

   (d) Repeat steps (b) and (c) to enter all 5 digits as required.

   (e) Now press and hold the **F** key. The entire Ident will flash for a few seconds then the radio will beep as the new Ident is stored.

RECALLING SELCALL IDENTS FROM THE MEMORY

1. Press the **CALL** key to select the 'CALL TO' mode. **'CALL TO'** is displayed along with the last sent or received Selcall Ident.

2. Press the ▲ or ▼ channel keys to select the Ident memory that you wish to recall (locations c0 to c9).

3. When the required Selcall memory is displayed, press and hold the **CALL** key to send the Ident.

NAMING YOUR SELCALL IDENTS

The TX6200 allows you to name each Selcall Ident using a 5 character ALPHA name. The name is stored in memory along with the Ident making it easier to identify whose Ident you are recalling from the memory. If an incoming Selcall matches one of those in your radio's

memory, the name can be displayed instead of the Selcall Ident.

Displaying ALPHA names

To display the Selcall's ALPHA Name, you must have the radio's ALPHA display mode selected. To toggle the ALPHA display mode, briefly press the **Call** key to enter the 'Call To' mode, then briefly press the **Monitor** key. A high beep indicates Alpha mode is selected while a low beep means the Ident mode is selected. To exit the 'Call To' mode, briefly press the **Call** key again, or simply wait until it times out.

TIP: The normal channel display will give no indication of which display mode is selected. Only when displaying Idents will it become obvious which mode is presently selected.

Alpha name

Entering and storing a Selcall name

NOTE: Before adding an ALPHA Name to a Selcall Ident, you should first store the required Ident in memory as described above under 'STORING SELCALL IDENTS' on page 15.

1. Briefly press the **CALL** key. The **'CALL TO'** mode will be selected and the last-sent Selcall memory location will be displayed.
2. Press the **Monitor** key to select the ALPHA mode. A high beep indicates ALPHA mode is selected. If you hear a low beep, briefly press **Monitor** again.
3. Press the ▲ or ▼ channel keys to select the Selcall memory that you wish to programme (locations c0 to c9). If no ALPHA name has been programmed for that memory the radio will probably display - - - - - otherwise it will display the ALPHA name last programmed into that memory.
4. With the required memory location displayed, enter the required ALPHA name as follows:

   (a) Briefly press the F key. The left-hand character of the ALPHA name will flash.

   (b) Briefly press the channel ▲ or ▼ keys to change the letter in the flashing character position.

   The following characters are available:

   0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z SPACE -

   TIP: Holding the ▲ or ▼ key for a few seconds will cause the radio to step quickly through the available characters.

   (c) Briefly press the **F** key again to select the next character position.

   (d) Repeat steps (b) and (c) to program all 5 characters as required.
5. Now press and hold the **F** key. The ALPHA name will flash for a few seconds, then the radio will beep as the name is stored.

Repeat the procedure to add ALPHA names to any other Selcall Idents stored in memory.

To exit the 'CALL TO' mode, briefly press the **CALL** key. The radio will return to normal operation.

NOTE: The radio can be left in the ALPHA display mode so that an incoming Selcall matching one of those in the radio's memory will display the name associated with that Selcall Ident instead of the Ident itself. Any incoming Selcall's not matching those in the memory will display just the Ident in the usual way.

RECEIVING SELCALLS

When your TX6200 receives its own Selcall number, it will beep to alert you to the call. In addition, it will cancel the QUIET mode

(if selected) and display the Ident or ALPHA name of the caller.

Displaying the Callers Ident or name

Whenever your TX6200 receives its own Selcall Ident, the words 'CALL FROM' will appear on the display along with the callers Selcall Ident or ALPHA name to inform you of the identity of the person calling. To switch between the Selcall Ident and the ALPHA name briefly press the **CALL** key to enter the 'Call To' mode, then press the **Monitor** key to toggle between Ident and ALPHA modes.

The Selcall alert

When your TX6200 receives its Selcall Ident, an alarm will sound in the speaker to alert you to the call. Initially the alarm will beep urgently at 2 beeps per second for around 10 seconds. The alarm will then stop, however the radio will remain in the 'Call From' mode with the callers Ident or Alpha name displayed.

Cancelling the Selcall alert

Pressing just about any key on the TX6200 will cancel the Selcall Alarm. However, the following are the recommended methods.

- **If you want to Cancel the Alarm and listen on the channel:**
  Briefly press the **QUIET** key. The alarm will stop beeping and the channel will remain open to any incoming signals.
- **If you want to Cancel the Alarm and talk on the channel:**
  Press the **PTT** switch and talk in the usual way. The alarm will be cancelled and the channel will be open for normal communication.
- **If you want to immediately return the call:**
  Press and hold the **CALL** key for a few seconds until the radio beeps. The 'callers' Selcall will be returned to the caller.

Call acknowledge signal

When your TX6200 receives its own Selcall Ident, it automatically responds by transmitting an 'acknowledge' signal back to the caller. This informs the caller that their Selcall transmission has been successful and that your radio is alerting you to their call. The 'acknowledge' signal is heard at the caller's end as two quick beeps.

QUIET MODE

The QUIET mode mutes the TX6200's receiver to prevent any incoming signals from being heard in the speaker until your Selcall Ident is received. In this way you can monitor a busy channel for personal calls without being disturbed by unwanted signals.

If your Selcall Ident is received, the QUIET mode is then cancelled and all incoming signals are heard in the speaker.

Setting up the quiet mode

To setup the QUIET mode you must first 'tag' the channels that you want to stay Quiet, then activate the QUIET mode. Once the QUIET mode is activated, the channels you have tagged will remain Quiet to all incoming signals unless your Selcall Ident is received. Channels not tagged will remain open to all signals and will operate normally.

To tag individual channels for QUIET operation

1. Select the required channel using the ▲ or ▼ Channel keys.
2. Press and HOLD the **QUIET** key until a high beep is heard. 'Q' will appear to the right of the channel display indicating the selected channel is now tagged for Quiet operation.

   To remove the **QUIET** Tag from Individual Channels:

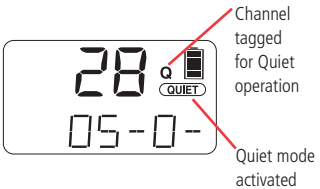
1. Select a channel that has been tagged for Quiet operation. 'Q' will be displayed.

2. Now press and hold the **QUIET** key until a low beep is heard. 'Q' will disappear indicating this channel is no longer tagged for Quiet operation.

To activate the QUIET mode

1. First, select a channel that has been tagged for Quiet operation (you cannot activate the Quiet mode unless you have selected a 'tagged' channel). 'Q' will be displayed
2. Now briefly press the **QUIET** key. 'QUIET' will appear on the display.

Now all channels tagged for Quiet operation will be operating in the Quiet Mode.



To de-activate the QUIET mode

1. Select any channel that has been tagged for Quiet operation. 'Q' and 'QUIET' will be displayed.
2. Briefly press the **QUIET** key. 'QUIET' will disappear from the display and all channels tagged for Quiet operation will now operate normally again.

Receiving signals in the QUIET mode

- If a normal signal is received on a QUIET channel, the channel will appear busy (the 'BUSY' indicator will be visible) but no sound will be heard from the speaker. This means you will not be disturbed by the signal.
- If a normal signal is received on an Open channel (one that is not tagged with 'Q') the signal will be heard in the usual way.
- If a signal containing your Selcall Ident is received on any channel - Open or QUIET – the QUIET mode will be cancelled and the alarm will beep to alert you to the call. In addition, the callers Ident or ALPHA name will be displayed.
  All channels will now be open for normal transmission and reception.

SCANNING IN THE QUIET MODE

The TX6200 will allow you to scan while the QUIET mode is active. Using this feature you can monitor a group of Quiet channels or a combination of Quiet and Open channels.

To scan in the QUIET mode

1. Briefly press the **F** key followed immediately by the **OS/GS** key to select the required Scan group.
2. Select the channels you wish to scan and store them in the Scan memory.
3. From those channels, select the ones you wish to remain Quiet and tag each one for QUIET operation.
4. Press the **SCAN** key. The radio will begin scanning and 'SCAN' will be displayed.
5. Now, briefly press the **QUIET** key to activate the QUIET Mode. The radio will then be scanning in the QUIET mode.

Receiving signals while scanning in the QUIET mode

- If a normal signal is received on an open channel, scanning will pause while the channel is busy and will resume scanning 5 seconds after the channel becomes clear. (If you were scanning in Group Scan mode, the radio may switch between the open channel and the Priority channel - this is normal).
- If a normal signal is received on a Quiet channel but your Selcall Ident is not detected, the signal will be ignored and scanning will continue.

- If a signal containing your Selcall Ident is received on any channel – Open or Quiet – both scanning and QUIET modes will be cancelled and the receiver will stay on that channel. In addition, the alarm will beep to alert you to the call and the callers Ident or ALPHA Name will be displayed. The channel will now be open for normal transmission and reception.

TIP: To ensure reliable Selcall detection when scanning in the Open Scan mode, it is recommended that you restrict the number of channels in the Scan group to 10 or less.

GROUP CALLING

The TX6200's Selcall system includes a Group Call function which allows you to call up to 10 radios simultaneously. This can be useful in an emergency situation where you may need to transmit a message to a number of radios in your group.

The Group Call function works by allowing you to enter a special 'group code' into the last digit position of the Selcall Ident you are sending. The 'group code' appears as an 'A' when displayed in the radio. When this 'group code' is received, it substitutes for any other number in the last digit position. As long as the first 4 digits of the Selcall you are sending match those of the radios you are calling, their Selcall alarm will be activated as if their full 5 digit Selcall Idents had been received.

To achieve this, the 10 radios you are calling must be programmed with sequentially numbered Selcall Idents.

e.g. 12030, 12031--> 12039

- Transmitting the Selcall Ident 12031 will only activate the alarm in the radio with the Selcall Ident of 12031.
- Transmitting 1203A will activate the alarms in all radios with Idents 12030 through 12039 (a total of 10 radios).

If the radios in your fleet do not have sequentially numbered Selcall Idents and you want to make use of this function, you can arrange for your dealer to re-program the Selcall Idents in your radios.

Programming and sending group calls

The process for entering a Group call Ident is the same as entering a normal Selcall Ident.

1. Press the **CALL** key to select the 'CALL TO' mode. 'CALL TO' is displayed along with the last sent or received Selcall Ident. If the radio is in the ALPHA mode, briefly press the **Monitor** key to return to the Ident display.
2. Enter the required Selcall Ident as follows:

a. Briefly press the **F** key. The right-hand digit of the Selcall Ident will flash.

b. Press the ▲ or ▼ channel keys to select 'A' in the flashing digit position. This is the special code that will create the Group Call.

c. Briefly press the **F** key again to select the next digit position.

d. Press the ▲ or ▼ channel keys to select the required number in the next flashing digit position.

e. Repeat steps (c) and (d) to enter all 5 digits as required. When completed, the first 4 digits of the Ident you have entered will match all the radios in the group. The last digit will be set to 'A'.

Once the Ident has been entered you have 20 seconds to send it otherwise the 'CALL TO' mode will be cancelled and the Ident you entered will be lost.

To send the Selcall Ident

With the required Selcall Ident displayed in the 'CALL TO' mode, press and hold the CALL key for a few seconds until the radio beeps. The Selcall Ident will be sent automatically and the radio will return to normal operation.

Call acknowledge in Group mode

There is no call acknowledge when sending group calls. This is to prevent all the radios in your group from trying to respond to your Selcall transmission at the same time.

Storing Group call Idents

Group Call Idents can be stored in memory in the same way as a standard Selcall Ident.

Receiving Group calls

Receiving a Group call is identical to receiving a normal Selcall except that the alarm sound is a LOW tone beep instead of the normal High tone beep. The Callers Ident or ALPHA Name appears on the display in the usual way.

CTCSS

OVERVIEW

CTCSS (Continuous Tone Coded Squelch System) is a squelch quieting system that allows several groups of users to share the same channel without disturbing each other. It uses one of 50 preset sub-audible (very low frequency) tones to open and close the squelch on your radio. The system applies a continuous low-level tone to your transmission and a matching tone decoder to your receiver's squelch. With CTCSS enabled, the channel remains quiet to all incoming signals unless they carry the correct tone. When a transmission with the correct tone is received, the squelch opens and remains open for as long as the signal is present. When the transmission ends, the channel becomes quiet again. Transmissions that do not use the correct tone will not be heard.

The TX6200 allows CTCSS to be enabled or disabled on individual channels. In addition, the CTCSS tone frequency is user programmable. Note that the CTCSS tone you select will be used for all CTCSS enabled channels in your radio.

MONITOR FUNCTION

The monitor function temporarily opens your radio's squelch to allow you to listen for signals from other CTCSS users outside your group. Because their CTCSS tone is different to yours, your squelch would normally remain closed, preventing you from hearing them.
By using the Monitor switch, you can open the squelch and listen on the channel to check that it is clear before transmitting. This will help prevent you from accidently transmitting over the top of someone.

To use the Monitor function, press the **Monitor** key. If no signals are present you will hear the usual hiss of an empty channel. Press the **Monitor** key again to restore the Squelch to its previous setting.

SELECTING THE REQUIRED CTCSS TONE

To select the required CTCSS tone on your radio, use the following procedure:

1. Press and hold the **F** key for about 1.5 seconds. The radio will enter the Menu mode.
2. Now press the **F** key once to enter the CTCSS setting mode. CTC will be displayed along with a number from 01 to 50 (if CTCSS is turned off it will display **oF**). The factory default setting is **oF**.

CTCSS is turned Off

3. Press the ▲ or ▼ keys to change the number to match the required CTCSS tone in the adjacent CTCSS Tone Frequency Chart. To disable CTCSS operation, set the number to 'oF.'

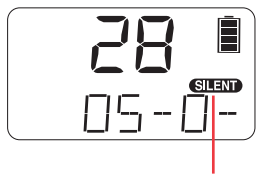
CTCSS tone 42 selected

4. Press and hold the **F** key for a few seconds to store the selected CTCSS tone and exit the Menu mode

TO ACTIVATE THE CTCSS FUNCTION ON A CHANNEL

The selected CTCSS tone can be activated on individual channels.
To activate CTCSS on a channel:

1. Press the ▲ or ▼ key to select the required channel.
2. Press and HOLD the **Monitor** key. A high beep will be heard and the 'SILENT' icon will appear on the display.



CTCSS is activated on this channel

NOTE: You may activate CTCSS on as many channels as you wish except the emergency channel 5/35.

To de-activate CTCSS on a channel, repeat steps 1 & 2 above. A low beep will be heard and 'SILENT' will disappear.

NOTE: You will not be able to activate CTCSS if the CTCSS tone is set to oF.

TIP: If you wish to identify which CTCSS tone is being used by stations on a particular frequency, simply enable CTCSS on that channel (so that SILENT is displayed) then use the process described under 'Selecting the required CTCSS tone' to step through the range of available CTCSS tones while the channel is busy. When the correct tone is selected, you will be able to hear the signal in the speaker.

38/50 TONE SET

Most GME radios use the GME-50 CTCSS tone set comprising 50 CTCSS tones. However some radios such as the GME TX610, TX630 and TX650 use a CCIR-38 Tone Set comprising 38 tones.

The TX6200 allows switching between the GME-50 and CCIR-38 Tone Sets to provide compatibility when these models are used together.

NOTE: This setting is only available when CTCSS is enabled on the radio.

To toggle between the CCIR-38 and GME-50 tone sets:

1. Turn the TX6200 OFF.
2. Press and hold the **SQL** key while turning the TX6200 ON.

The display will show the selected Tone Set for 5 seconds

i.e. CCIR -38 displays 'CTC38'
GME-50 displays 'CTC50'

Once selected, the setting remains stored in the radio until toggled again.

CTC38/CTC50 Tone set compatibility

The CTC50 tone set comprises all 38 tones from the CTC38 tone set plus an additional 12 tones. This means that when switching from CTC50 to CTC38, some of the tones will not be available. If your selected CTC50 tone has an equivalent CTC38 tone, the selected frequency will be retained where possible but the displayed tone number may change. Where the selected CTCSS tone doesn't exist, the CTCSS tone will be set to Off. See CTCSS TONE FREQUENCY chart below for comparison.

CTCSS TONE FREQUENCY CHART

50 Tone Set	38 Tone Set	Fre-quency	50 Tone Set	38 Tone Set	Fre-quency	50 Tone Set	38 Tone Set	Fre-quency
1	1	67.0	18	17	118.8	35	-	183.5
2	-	69.4	19	18	123.0	36	30	186.2
3	2	71.9	20	19	127.3	37	-	189.9
4	3	74.4	21	20	131.8	38	31	192.8
5	4	77.0	22	21	136.5	39	-	196.6
6	5	79.7	23	22	141.3	40	-	199.5
7	6	82.5	24	23	146.2	41	32	203.5
8	7	85.4	25	24	151.4	42	-	206.5
9	8	88.5	26	25	156.7	43	33	210.7
10	9	91.5	27	-	159.8	44	34	218.1
11	10	94.8	28	26	162.2	45	35	225.7
12	11	97.4	29	-	165.5	46	-	229.1
13	12	100.0	30	27	167.9	47	36	233.6
14	13	103.5	31	-	171.3	48	37	241.8
15	14	107.2	32	28	173.8	49	38	250.3
16	15	110.9	33	-	177.3	50	-	254.1
17	16	114.8	34	29	179.9	oF	oF	0
(CTCSS Frequency shown in Hz)								

The TX6200 menu feature provides a convenient method of customising some of the radio's functions. The follow parameters can be accessed:

CB channels
• Squelch Sensitivity Settings
• CTCSS Activation and Tone Frequencies
• S-Meter Display Function
Receive only channels
• Frequency Display and Edit
• Squelch Sensitivity Settings
• CTCSS Activation and Tone Frequencie
• S-Meter Display Function

IMPORTANT: Before accessing the Menu functions, ensure the radio is not in Scan or Call modes.

On normal CB channels, the Menu options are accessed in the following sequence:
Squelch Sensitivity -> CTCSS Tones -> S-Meter Display -> Exit

On 'Receive Only' channels, the sequence is:
Frequency Edit -> Squelch Sensitivity -> CTCSS Tones -> S-Meter Display -> Exit

To access the Menu functions

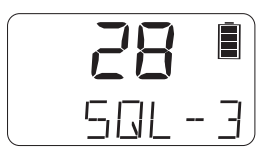
- Press and HOLD the **F** key until the radio beeps. The Menu mode will be selected and the first Menu option will be displayed.
- Press the ▲ or ▼ key to change the setting of the selected option.
- Briefly press the **F** key again to cycle to the next Menu option.
- Pressing the **F** key again on the last Menu option will exit the Menu mode.

To exit the menu at any point, press and hold the **F** key until the radio beeps or simply wait 10 seconds and the menu will time out.

NOTE: When you change the settings within a Menu option, the new setting becomes available immediately.

SQUELCH SETTINGS MENU OPTION

The sensitivity of the Squelch to incoming signals can be set to suit your operating environment. The TX6200 has three preset squelch sensitivity settings (SQL-1, SQL-2 & SQL-3) which can be selected in the Squelch setting menu.



SQL-1: Maximum Sensitivity

The squelch will open even on very weak signals. This is the best setting for quiet country or rural locations where there are few weak unwanted signals or little locally generated interference.

SQL-2: Medium Sensitivity

The squelch will open on most signals, but will not be as sensitive to very weak signals or local interference. Suitable for general or suburban use.

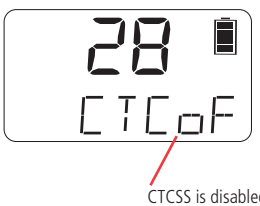
SQL-3: minimum sensitivity.

The squelch will open on reasonably strong signals and weak signals will not be heard. Suitable for inner city applications or areas of severe interference.

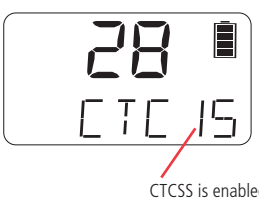
CTCSS SETTINGS MENU OPTION

Use the CTCSS Menu option to set the required CTCSS tone or to disable the CTCSS function.

- To enable CTCSS and set the CTCSS tone, select a number from 01 to 50 that matches the required tone in the table provided in the CTCSS section of this manual.
- To disable CTCSS on the radio, set the CTCSS to **oF**.



CTCSS is disabled



CTCSS is enabled and set to tone 15 (107.2 Hz)

SIGNAL METER DISPLAY MENU OPTION

The signal meter display is factory set to display the signal strength of the incoming signal. However it can also be set to display other options. The following options are available.

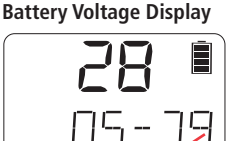
On CB Channels 1 – 80:

- **oFF** – The Signal Meter display is turned off. Nothing will be displayed in the signal meter area.
- **bATT** – The battery charge level is displayed in Volts in the Signal Meter area.
- **S-MET** – Incoming signal levels are displayed in the Signal Meter area.

On User 'Receive Only' Channels 81 – 99:

- **oFF** – The Signal Meter Display is turned off. Nothing will be displayed in the signal meter area.
- **bATT** – The battery charge level is displayed in Volts in the Signal Meter area.
- **S-MET** – Incoming signal levels are displayed in the Signal Meter area.
- **FREQ** – The 'Receive Only' channel frequency is displayed in the Signal Meter area.

Battery Voltage Display



Indicates 7.9 Volts

Your TX6200 has provision for an extra 19 Receive-Only channels in addition to the standard 80 UHF CB channels provided. These extra channels can be user programmed into channel positions 81 through 99 within the frequency range of 403 to 520 MHz. Frequencies are selected in 125 kHz steps. Note that the standard CB channels 1 through 80 are fixed and cannot be altered or disabled.

SELECTING THE USER CHANNEL FREQUENCY EDIT STEP SIZE

Before editing or programming 'Receive Only' channels, you should preset the size of the frequency step between the channels. The step options are 12.5 kHz or 25 kHz. The setting applies only to the editing of 'Receive Only' channels (81 – 99) and has no effect on normal CB channels (1 – 80).

To set the Channel step:

1. Turn the TX6200 OFF
2. Press and hold the key while turning the TX6200 ON.

The display will show the selected channel step for 5 seconds.

i.e. 12.5 kHz steps displays '12.5k'
25 kHz steps displays '25,0k'

Once selected, the setting remains stored in the radio until toggled again.

NOTE: If the step size is change from 12.5 kHz back to 25 kHz, any frequencies currently stored in 12.5 kHz steps remain unchanged. However if any of these channels are edited, their frequencies can only be altered in 25 kHz steps with a 12.5 kHz offset. To return these channels to a normal offset, set these channels to OFF then restart the radio in the programming mode.

IMPORTANT: The display is only able to show the first 5 digits of the frequency i.e. the last kHz digits are not displayed.

However it is easy to 'guess' the actual frequency since the missing digits will always alternate between 2.5 or 5 kHz

EXAMPLES :

FREQUENCY	DISPLAY
468.0125 MHz	468.01
468.0250 MHz	468.02
468.0375 MHz	468.03
12.5 KHz STEPS	

FREQUENCY	DISPLAY
468.000 MHz	468.00
468.025 MHz	468.02
468.050 MHz	468.03
25 KHz STEPS	

ACTIVATING THE PROGRAMMING' MODE

Your TX6200 is supplied from the factory with the Receive-Only channels deactivated. You can activate and program them yourself as follows:

1. Turn the radio OFF.
2. Press and hold the **F** key while turning the radio ON. The radio will beep.
3. Release the **F** key. The radio is now in 'Programming' Mode.

Press the ▲ or ▼ channel key to select a channel number above channel 80. You will now find that you can select additional channel numbers 81 through 99. Initially, these channels will have no frequencies installed and are in effect, turned OFF. Each individual channel will need to be turned ON and programmed with the receive frequency of your choice.

Programming the Receive-Only channels

Your TX6200 must be in programming mode before proceeding.

1. Select the channel number you wish to program (81 to 99).

2. Press and HOLD the **F** key until the radio beeps (about 2 seconds). If there is no frequency programmed into that channel, **-OFF-** will be displayed
3. Press the ▲ key to activate the channel. A frequency of 403.00 MHz will be displayed (the bottom of the useable frequency band). Now press the ▲ or ▼ keys to select the desired frequency in 25 or 12.5 kHz steps to a maximum frequency of 520 MHz.
4. To change the frequency faster, briefly press the **CALL** key. Now press the ▲ or ▼ key to step through the frequencies in 1 MHz steps. Briefly press the **CALL** key again to return to 25 or 12.5 kHz steps.
5. When the desired frequency is displayed, press and HOLD the **F** key until the radio beeps. The frequency is now stored under the selected channel number.

TIP: The radio is able to receive signals on the displayed frequency the instant you select it. This feature allows you to manually tune through the frequencies looking for signals or active channels in your area.

Once you have programmed the required channels, switch the radio OFF to exit the programming mode.

Now when you switch the radio on, you will be able to select the usual 80 CB channels plus the additional channels you have programmed.

NOTE: There is no provision to transmit on the Receive-Only channels. If the PTT switch is pressed on a Receive-Only channel, the radio will emit a low beep.

EDITING YOUR PROGRAMMED RECEIVE CHANNELS

The Receive-Only channels you have programmed can be edited at any time. You do not need to re-enter the programming mode.

To edit a Receive-Only channel:

1. Select the required channel.
2. Press and hold the **F** key for about 2 seconds until it beeps. The frequency stored in that channel will be displayed.
3. Press the ▲ or ▼ key to select a new frequency.
4. To store the new frequency, press and hold the **F** key until the radio beeps.

Disabling a Receive-Only channel

If you no longer wish to display a Receive-Only channel, you can switch it off so the channel number no longer appears when selecting channels.

1. Select the receive-only channel that you wish to disable.
2. Press and hold the **F** key for about 2 seconds until the radio beeps. The frequency stored in that channel will be displayed.
3. Briefly press the **CALL** key to select the MHz frequency stepping mode. This will allow faster frequency changing.
4. Press and HOLD the ▼ key to step down through the frequencies until -OFF- is displayed.
5. Press and hold the **F** key to store the new setting.

Scanning on Receive-Only channels

The additional receive channels can be programmed into your scan groups in the same way as your normal CB channels. Simply select the required receive-only channel, select the required scan group (Open or Group Scan), then press and hold the SCAN key until the radio beeps. 'M' will be displayed on that channel to indicate that it is in the scan memory. For more details, see the section on 'Scanning' in this manual.

Receiving selcalls on your Receive-Only channels

If your TX6200 receives its Selcall code on a Receive-Only channel, it will respond in the usual way, except that it cannot automatically transmit two quick

beeps back to the caller since there is no transmit frequency. For more details, see the section on 'Selcall' in this manual.

CTCSS

CTCSS can be enabled on the Receive-Only channels.

MAINTAINING YOUR BATTERY PACK

For information on removing, fitting and recharging the battery pack, refer to 'GETTING STARTED' on page 5 of this manual.

Your TX6200 is supplied with a 7.2 Volt 1200 mAh Ni-MH (Nickel Metal Hydride) rechargeable battery pack.

When the battery pack is new, it must be fully charged before being used for the first time.

If left unused, your TX6200's battery pack will discharge itself within a few months. If you have not used your TX6200 for some time, you will need to recharge the battery pack before use.

The battery pack is a sealed unit. There are no user serviceable parts inside.

LOW BATTERY INDICATORS

When the battery voltage drops to around 6 Volts, your TX6200 will give 6 quick beeps, BATT will flash on the display and the Tx/Busy LED will flash 'Orange' to indicate that the battery needs to be charged. You should recharge the battery pack as soon as possible.

If you have been transmitting using the High Power setting, you can extend the life by switching to Low transmit power.

BATTERY CHARGING

It is recommended that you charge your TX6200's battery using the BCT001 trickle charger supplied. The BCT001 can recharge your battery pack in around 8-10 hours, less if there is still some charge remaining. The charger will then continue to trickle charge the battery, however, for maximum long term battery life it is recommended you disconnect the charger when charging is complete.

USE ONLY GME APPROVED BATTERY PACKS AND CHARGERS. USE OF OTHER TYPES MAY BE DANGEROUS AND WILL VOID THE WARRANTY. DO NOT CONNECT YOUR VEHICLE'S 13.8 VOLT BATTERY SUPPLY TO THE CHARGING SOCKET AS DAMAGE WILL RESULT.

CYCLING YOUR BATTERY PACK

Cycling of your Ni-MH battery should not be necessary. However, for maximum performance we recommend that you try to fully discharge the battery from time to time before recharging it.

BATTERY USAGE

The time taken to discharge the battery pack will depend on how you use your TX6200. The 1200 mAh battery pack is powerful enough for a full days use under average conditions.

Conserving battery power

The TX6200 has built in power saving features to help you get the maximum amount of time between charges from your Ni-MH battery pack. If you need to operate your TX6200 in a situation where you require maximum battery life (e.g. a remote site where there is no convenient recharging facility nearby), the following hints can greatly reduce the amount of power drawn from the battery pack.

Sleep mode

The TX6200 will automatically enter the 'Sleep' mode after around 20 seconds of inactivity (i.e. no transmission or reception).

While sleeping, it will still check for incoming signals but it will draw only about one fifth of the power from the battery. As soon as a signal is received or any keys are pressed, the TX6200 will wake up again. This sleep function is automatic and by itself can greatly extend the battery life in standby mode by many hours.

Quiet mode

If 'Quiet' mode is selected, the TX6200 will remain 'asleep' on Quiet channels even if they are busy unless your Selcall Ident is received.

Scanning

The TX6200 draws more power from the battery when scanning than when monitoring a single channel. This is because it must wake more often to monitor each channel for activity. You can squeeze that extra bit of life from the battery by avoiding any unnecessary scanning. In addition, scanning several channels increases the chance of finding a signal thereby keeping the receiver awake and the squelch open more often.

Low transmit power setting

The transmitter has both High and Low power settings. If you are only operating over short distances, are in a reasonably high location or are close to a local repeater, try using the LOW transmit power setting. This reduces the transmitter power from 5 Watts to 1 Watt, effectively tripling the 'talk' time available.

General

Continuously monitoring a busy channel will reduce the battery life since incoming signals will keep the receiver awake and the squelch will stay open for longer periods of time. This will draw much more power from the battery pack. If you are expecting to receive a Selcall on a busy channel, program that channel for 'Quiet' operation and select the Quiet mode. The TX6200 will then stay 'asleep' until your Selcall Ident is received.

SIMPLEX/DUPLEX RANGE

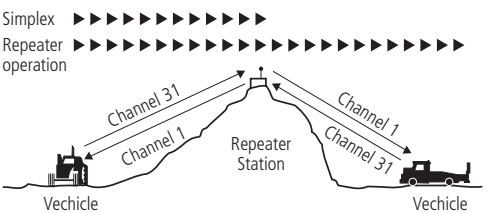
A repeater system consists of a linked transmitter/receiver combination installed in a prominent location. The repeater is designed to receive signals on a designated channel and re-transmit them on another channel.

Repeaters are usually located on hills, mountains or tall buildings. The increased elevation greatly improves the range of the repeater beyond that of a normal base or mobile. This means that the repeaters are able to receive and retransmit signals to radios that would otherwise be out of range of each other.

Normally, UHF transceivers transmit and receive on the same channel. This is known as SIMPLEX operation. However, to communicate through repeaters, your transceiver must be able to transmit and receive on different channels (known as DUPLEX). Your TX6200 has a Duplex key to allow you to operate through repeaters.

The Duplex function only operates on channels 1 – 8 and 41 – 48, as these are the channels that have been designated for repeater use. When Duplex mode is selected, your TX6200 receives on the selected channel (e.g. channel 1) but automatically transmits 30 channels higher (i.e. channel 31). The UHF repeater receives your signal on channel 31 and retransmits it on channel 1 for others to hear.

Simplex/Duplex Range Comparison



SPECIFICATIONS

GENERAL

Compliance:
Compliant with AS/NZS 4365 for radio communications equipment in the UHF citizen band and personal radio service.

Frequency Range:
476.425 MHz - 477.4125 MHz

Number of Channels:
80 (plus 19 receive only)

Frequency Range (receive only):
403 MHz - 520 MHz

Channel Spacing:
12.5 kHz

Operating Mode:
Simplex or half duplex .

Scanning Speed:
40 ms per channel
(25 channels per second)

Antenna Impedance:
50 Ohms nominal

Battery Voltage:
7.2 Volts DC nominal

Operating Voltage Range:
6 - 10 Volts DC

Low Battery Alarm:
6.2 Volts DC

Reverse Voltage Protection:
Shunt Diode

Operating Temperature:
-20° C to +60° C

TRANSMITTER

RF Output:
High: 5 Watts
Low: 1 Watt

Spurious Emission:
< - 67 dB

Frequency Transients During Switching:
< 3 kHz

Frequency Stability:
± 5 PPM

Modulation:
FM

Maximum Deviation:
< ± 5 kHz at + 20 dB Limiting

Transmit Frequency Response:
+ 6 dB per octave 300 Hz to 3 kHz,
+ 1, - 3 dB

Audio Signal to Noise:
> 40 dB.

Current Consumption (max):
2.0 Amps.

RECEIVER

RF Bandwidth:
RF: 5 MHz
Tuneable: 117 MHz

Intermediate Frequencies:
1st: 21.4 MHz
2nd: 450 kHz

Sensitivity:
- 123 dBm for 12 dB SINAD.

Sensitivity of Receive-only Channels:
-120 dBm for 12 dB SINAD

Selectivity:
- 6 dB ± 7.5 kHz
- 63 dB ± 25 kHz

Intermodulation Immunity:
>65 dB

Blocking Immunity:
>90 dB

Spurious Response Immunity:
>70 dB

Image Rejection:
>60 dB

Audio Output Power:
0.5 watts at <10% distortion.

Audio Signal to Noise:
> 40 dB.

Receiver Frequency Response:
- 6 dB per octave de-emphasis,
300 Hz to 3 kHz, + 1, - 3 dB.

Current Consumption:
15 mA Sleep Mode.
40 mA Muted.
180 mA Full Volume.

Conducted Spurious Emission:
< - 75 dBm

Squelch:
SQL-1: -122 dBm typical
SQL-2: -117 dBm typical
SQL-3: -112 dBm typical
Close: -124 dBm typical

MECHANICAL SPECIFICATION
& CONNECTORS

Dimensions:
135 mm (W) x 63 mm (D) x 40 mm (H)

Weight:
390 grams

Antenna:
TNC Female

Speaker/Microphone/Programming:
Speaker: 3.5 mm mono socket
Programming/Microphone: 2.5 mm
stereo socket

Battery Charging:
Trickle: 3.5 mm DC Socket
Rapid Charge: 3 plated terminals
with temperature sensor.

All values are typical unless otherwise stated and are subject to change without notice or obligation.

1. WARRANTIES

1.1 The Trade Practices Act Part V, Division 2A and other legislation imply conditions, warranties and other obligations on us to consumers that cannot be excluded, restricted or modified. Those provisions apply to the extent required by law.

1.2 We exclude all other conditions, warranties and obligations which would otherwise be implied concerning the activities covered by this agreement.

1.3 We limit our liability where we are allowed to do so. Examples of where we are allowed to limit liability are

(a) you acquire goods from us for re-supply;

(b) the goods or services we supply are not of a kind ordinarily acquired for personal, domestic or household use or consumption.

1.4 Where we are allowed to limit our liability, to the extent permitted by law, our sole liability for breach of a condition, warranty or other obligation implied by law is limited -

(a) in the case of goods we supply, to any one of the following as we decide -

(i) the replacement of the goods or the supply of equivalent goods;

(ii) the repair of the goods;

(iii) the payment of the cost of repairing the goods or of acquiring equivalent goods;

(iv) the payment of the cost of having the goods repaired; or

(b) in the case of services we supply, to any one of the following as we decide -

(i) the supplying of the services again;

(ii) the payment of the cost of having the services supplied again.

2. ADDITIONAL WARRANTIES

2.1 The warranties in this clause are in addition to the statutory warranties referred to in the previous clause.

2.2 We warrant our goods to be free from defects in materials and workmanship for three years from the date of original sale (or another period we agree to in writing). During this period and as our sole liability to you under this warranty, we agree to, at our option, either repair or replace goods which we are satisfied are defective. We warrant replacement parts for the remainder of the period of warranty for the goods into which they are incorporated.

2.3 We warrant our other repairs to be free from defects in materials and workmanship for three months from the date of the original repair. During this period and as our sole liability to you for the repair, we agree to repair or replace (at our option) repaired goods which we are satisfied are defective.

2.4 We warrant that we will perform services with reasonable care and skill and agree to investigate any complaint made in good faith that we have performed services unsatisfactorily. If we are satisfied that the complaint is justified, and as our sole liability to you under this warranty, we agree to supply those services again at no extra charge to you.

2.5 If you want warranty service under this clause you must give us an original or copy of the sales invoice from the transaction or some other evidence showing details of the transaction.

3. OTHER LIMITATIONS

3.1 You may not rely on any representation, warranty or other provision by or for us which is not covered by clause [1] or repeated in this agreement in clear terms.

3.2 We are not liable (nor are our employees, contractors and agents) for any damage, economic loss or loss of profits whether direct, indirect, general, special or consequential -

(a) arising out of any breach of any implied or express term, condition or warranty; or

(b) suffered as a result of our negligence (or that of our employees, contractors or agents) apart from liability as set out in the previous two clauses.

3.3 The liability of a party under this agreement (whether arising in contract, tort or by statute) is to be reduced by the same proportion as represents the proportion of the loss or damage caused or contributed to by the other party, its contractors or agents.

GME AFTER SALES SERVICE

Your GME TX3420 is especially designed for the environment encountered in mobile or portable applications. The use of all solid state circuitry, careful design and rigorous testing, result in high reliability. Should failure occur however, GME maintain a fully equipped service facility and spare parts stock to meet the customer's requirements long after expiry of the warranty period.

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List of certified characteristics available at www.sgs.com

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For customers outside Australia and New Zealand, please contact your local GME retailer or email to: export@gme.net.au
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