

## FEATURES

Congratulations on your selection of a quality **XACT** product. With proper care and adherence to the set-up and user instructions in this Owner's Manual, this unit will provide you with years of trouble-free service.

**XACT** is committed to providing quality products that fit your needs. We would like to have any comments or suggestions you might have on this product. You may mail your comments to:

U.S. Electronics  
105 Madison Avenue  
New York, NY 10016

The M2X is the newest generation in personal two-way communications. The M2X is a lightweight, compact two-way communication device that can be used to communicate with family or friends at parks, shopping malls, sporting events, concerts – any indoor or outdoor activity.

Here are some of the features of this new two-way COMMUNICATOR:

- Key Chain Style with Detachable Metal Arc
- 22 FRS/GMRS Channels
- Up to 2.0 Mile Range
- Auto Squelch
- Auto Battery Saving
- Internal VOX
- Channel Scan
- 12 Hour AM/PM Time Clock
- Backlit LCD Display on COMMUNICATOR Mode
- Uses 3 AAA size Alkaline battery with NiMH battery capability (not included)

Please read this Owner's Manual carefully to get the most out of your TWO-WAY COMMUNICATOR.

**NOTE** The maximum range will vary depending on terrain and environment. Range will be greater in open fields. While range is shorter within and around buildings or large structures. This unit may not ensure privacy of communication.

## FCC NOTICE

### ***Safety Information :***

Your wireless hand-held portable transceiver contains a low power transmitter. When the Push-to-Talk (PTT) key is pushed it sends out COMMUNICATOR frequency (RF) signals. This device is authorized to operate at a duty factor not to exceed 50%.

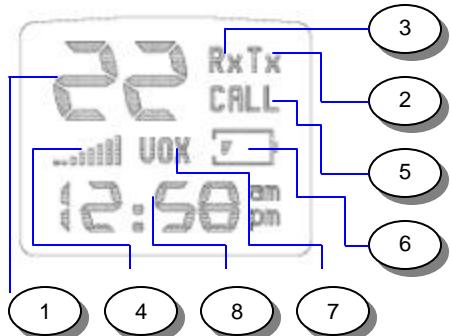
In August 1996, The Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

Important Note: To maintain compliance with the FCC's RF exposure guidelines, hold the transmitter and ANTENNA at least 1 inch (2.5 centimeters) from your face and speak in a normal voice, with the antenna pointed away from the face. If you wear the handset on your body while using the headset accessory, use only the manufacturer's supplied BELT CLIP for this product and ensure that the ANTENNA is at least 1 inch (2.5 centimeters) from your body when transmitting.

Use only supplied ANTENNA. Unauthorized antennas, modifications, or attachments could damage the transmitter and may violate FCC regulations.

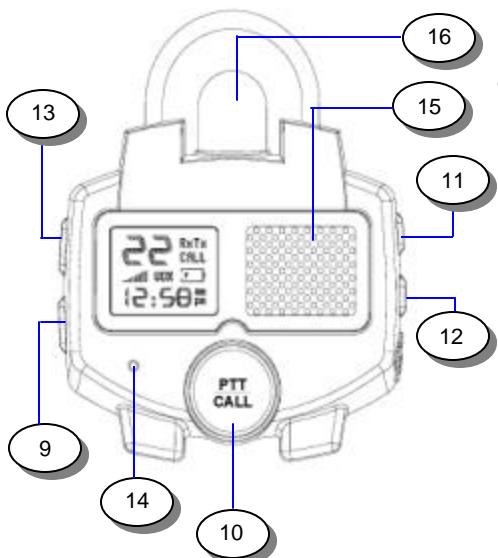
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## DISPLAYS



1. Channel Number (1~22) — Shows the current channel
2. Transmit Indicator (TX) — Indicates when the unit is transmitting
3. Receive Indicator (RX) — Indicates when the unit is receiving a transmission
4. Volume Selection (8 Bars) — Shows the current volume setting
5. Call Tone Transmission (CALL) — Indicates when the unit is paging
6. Low Battery Level indicator - Indicates when battery level is low or during charging the battery
7. VOX — Indicates when unit is in VOX mode
8. 12 Hour Time Clock (12:00)

## KEYS and CONTROLS

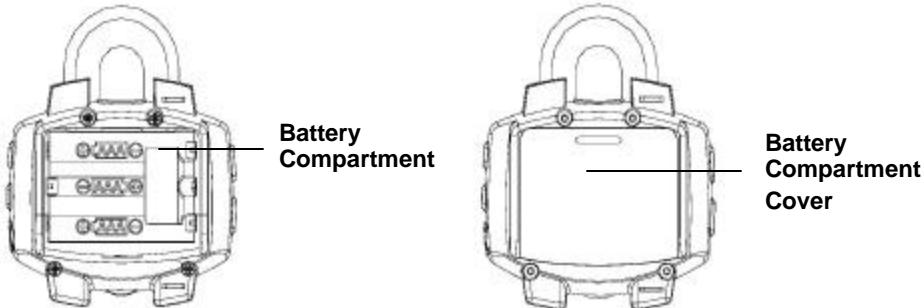


9. Power / Menu (Multi Function) — Press and hold to turn the COMMUNICATOR ON/OFF. Momentary press will enter the Menu and Clock setting.
10. PTT / Call (Multi Function) — Press and hold to transmit voice communication. Press twice in rapid action to transmit call tone.
11. Up — Used to adjust volume level (default), change channel and clock setting (in Menu)
12. Down — Used to adjust volume level (default), change channel and clock setting (in Menu)
13. Scan — Press to enter Channel Scan.
14. MIC — Built-in microphone
15. Speaker — Built-in speaker
16. Antenna

## BATTERY INSTALLATION

Your M2X COMMUNICATOR uses 3 AAA size Alkaline battery. To install the battery:

1. Slide down the Battery Compartment Cover located on the rear side of the unit, and remove the Battery Compartment Cover from the Battery Compartment.
2. Install the batteries into the Battery Compartment. Be certain to follow the correct battery orientation in the compartment. Installing the batteries incorrectly will prevent the unit from operating.
3. Replace the Battery Compartment Cover by sliding it up until it locks.



**CAUTION:** To reduce the risk of fire or personal injury, use only the battery listed in the instruction book. The M2X has a built in Power Saver feature for maximum battery life. But when the M2X is not being used, conserve battery power by pressing the Power Key to OFF. **Remove the battery if the unit will not be used for a long period of time.**

## BATTERY LEVEL AND LOW BATTERY OPERATION

In Watch and COMMUNICATOR Mode the Low Battery Level icon will not appear on the display unless the unit detects that the battery is low.

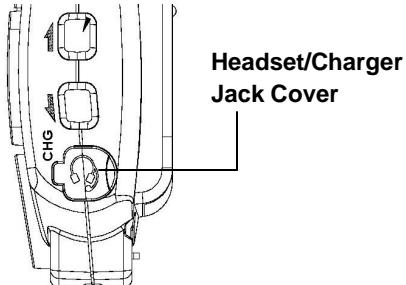
The unit has a Low Battery Level icon which will blink when it detects a low battery level in COMMUNICATOR and in Watch Mode. When the unit is in COMMUNICATOR Mode or Watch Mode and the battery level is low the icon will blink. You should replace the batteries by this time to continue operation.

Your COMMUNICATOR has the capability to use NiMH batteries, if you are using NiMH batteries you should recharge the batteries when the level becomes low. You can recharge the batteries thru the Headset / Charger jack found at the side of the unit.

## CHARGING THE BATTERY

Your M2X COMMUNICATOR comes with an A/C Adapter Charger to charge your NiMH batteries. To charge the batteries:

1. Lift the Headset / Charger Jack Cover located in the side of your unit.
2. Connect the A/C Adapter Charger into an A/C Wall outlet
2. Insert the A/C Adapter Charger into the Headset / Charger Jack. During charging, the Low Battery Level icon will disappear on the display once the battery level is above the Low Level limit.



**NOTE: Charge the NiMH batteries for approximately 12 hours before initial use. Do not attempt to charge Alkaline batteries as it may cause leakage and cause damage to the unit.**

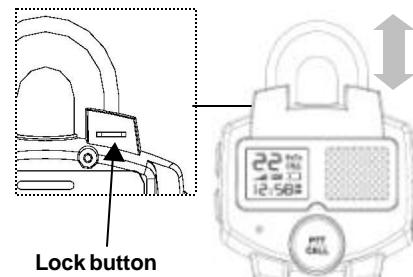
**The M2X have internal battery protection, however during long term storage it is strongly recommended that you recharge the battery every 6 months or remove the battery if the unit will not be used for a long period of time.**

## INSTALLING THE METAL ARC

Your M2X COMMUNICATOR comes with a Metal Arc and Belt Clip to allow you to clip your COMMUNICATOR in your Belt Hook.

**To install the Metal Arc, simply insert the Metal Arc in the COMMUNICATOR until it locks**

**To remove the Metal Arc, push the Lock button found at upper rear side of the unit and pull the Metal Arc from the unit.**



Your M2X COMMUNICATOR's Metal Arc can be installed on top or bottom of the unit, making it either a **“Good”** or **“Bad”** configuration.



**Good**



**Bad**

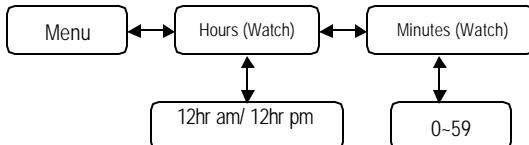
## USING THE COMMUNICATOR

1. Installing the battery will automatically turn-on the unit and proceeds to Watch Mode.
2. Enter to COMMUNICATOR Mode by pressing and holding the **Power** key for around 3 seconds. To exit COMMUNICATOR Mode, press the **Power** key for around 3 seconds while on COMMUNICATOR mode.
2. Check the battery condition on the display.
3. Adjust the volume to a comfortable level by pressing the **UP** or **DOWN** key (default).

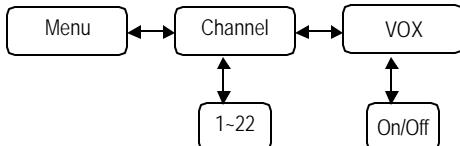
### Navigating through the Menu

To access the advance feature of the M2X, your COMMUNICATOR has a Menu two (2) function:

#### Watch Mode (Default)



#### COMMUNICATOR Mode



#### WATCH Mode

1. Your COMMUNICATOR will automatically go to Watch Mode once the battery is installed, only the watch segments and icons will be displayed on the LCD during this mode. Press the **Menu** key briefly to enter the Time Setting Mode; a short keybeep tone will be locally generated when the Time Setting mode is engaged.
2. Additional presses of the **Menu** key for no longer than 1 second will advance you through the menu until exiting to Watch mode. A short keybeep tone is generated at each key press
3. Menu mode exits to standby mode when the **Menu** key is pressed while the final menu selection is active.
4. The unit automatically times out of Menu mode and enters Watch mode in 10 seconds.

#### COMMUNICATOR MODE

1. To enter or exit to COMMUNICATOR Mode, press the **Power** key for around 3 seconds. A long keybeep tone is locally generated (after a short keybeep tone) when the unit goes into COMMUNICATOR Mode and the LCD will display the segments and icons for the COMMUNICATOR.
2. To enter the Menu Mode, press the **Menu** key briefly. A keybeep will be locally generated when the Menu Mode is engaged.
3. Additional presses of the **Menu** key for no longer than 1 second will advance you through the menu until exiting to COMMUNICATOR mode. A short keybeep tone is generated at each key press.
4. Menu mode exits to standby mode when the **Menu** key is pressed while the final menu selection is active.
5. Menu mode will automatically time out to standby mode 10 seconds after the last user programming is pressed.
6. Menu mode can be automatically cancelled by pressing **PTT/Call** key.

### To set the Time

Your M2X COMMUNICATOR has a 12-hour (AM/PM) Time Clock, which can be set as follows:

1. In Watch mode, enter to **Menu** mode by pressing the **Menu** key briefly until a short keybeep tone is heard. When the Setting mode is engaged, the **Hour** segment in the LCD Display will flash.
2. Press the **Up** or **Down** key to increase or decrease the **Hour** number displayed, a short keybeep tone is generated at each key press. The Time Setting will cycle within 12hour am and 12hour pm. To engage auto-repeat, press and hold the **Up** or **Down** key.
3. Advance thru the Menu by pressing the **Menu** key briefly until the **Minutes** segment is flashing. A short keybeep tone will be generated.
4. Press the **Up** or **Down** key to increase or decrease the **Minutes** number displayed. A short keybeep tone is generated at each key press. To engage auto-repeat, press and hold the **Up** or **Down** key.
5. Exit the **Menu** mode to return to "normal" mode by pressing the **Menu** key briefly or by automatic time out for about 10 seconds after last key is pressed.

## Choosing a Channel

Your M2X COMMUNICATOR has 22 channels you can use to talk to others. To choose a channel:

1. To enter or exit to COMMUNICATOR mode, press the **Power** key for about 3 seconds. A long keybeep tone is locally generated (after a short keybeep tone) when the unit goes into COMMUNICATOR Mode and the LCD will display the segments and icons for the COMMUNICATOR.
2. Press the **Menu** for at least one second. The Channel number on the LCD display will flash.
2. Press the **Up** or **Down** key to reach higher or lower channel. Auto-repeat is engaged by pressing and holding either the Up or Down key. You'll hear a standard key beep with each channel change.
3. To exit the Menu, press PTT/Call key.

## Channel Scan

To scan the whole 22 channels of the COMMUNICATOR for any activity

1. Press the **Scan** key found on the side of the unit. Once engaged, the unit will start to rapidly scan the whole 22 channels of the COMMUNICATOR for any activity. The unit will pause on an active channel for 4~5 seconds before resuming Scan function.
2. To exit the Scan mode, depress the **Scan** key

## Transmitting and Receiving

To use your M2X COMMUNICATOR to communicate with others:

1. The unit is continuously in RECEIVE mode when the unit is ON. Turn on COMMUNICATOR mode by pressing the **Power** key for 3 seconds.
2. Press and hold the **PTT** key and speak as you normally would, holding the microphone about 2~3 inches away from your mouth. While transmitting, the TX icon appears on the display. To avoid cutting off the first part of your transmission, do not speak immediately after pressing the **PTT/Call** key; first pause briefly, then speak.
2. When you are finished speaking, release the **PTT/Call** key. You are now ready to receive incoming transmission. While receiving transmission, the **RX** icon appears on the display.

For optimum performance, make sure the ANTENNA is pointing upright.

## Sending a Call Alert Tone

To send a Call Alert Tone, press the **PTT** key twice in rapid action. The Call Alert Tone will be automatically transmitted for a fixed length of time. During transmission, the **Call** icon will appear on the display and a Call Alert Tone is also locally generated for confirmation of operation. The COMMUNICATOR will return to standby mode following completion of the Call Tone sequence. For optimum performance, make sure the ANTENNA is pointing upright.

## Voice Operated Transmission (VOX)

Your M2X COMMUNICATOR is equipped with a user selectable **Voice Operated Transmitter (VOX)** that can be used for automatic voice transmission. In this convenient mode, transmission is automatically initiated by speaking into the microphone. There is no need to push the **PTT/Call** key.

### To adjust VOX level:

1. Enter to **Menu** mode. Advance through the Menu until the **VOX** icon appears on the display.
2. Press the **Up** or **Down** key to toggle between On and Off function of the VOX. When VOX feature is on, the VOX icon will appear on the LCD display.
3. To exit the Menu, press PTT/Call key.

**To get the full advantage of the convenience of a hands free transmission and the privacy of conversation, you can purchase an Ear Bud with Microphone (see Accessory Order Form) to be used in conjunction with the VOX feature of your COMMUNICATOR.**

### To use the Ear Bud:

1. Set your COMMUNICATOR to VOX Mode.
2. Lift the Headset / Charger Jack Cover located at the side of your unit.
3. Insert the Ear Bud Jack into the Headset Jack. Wear the Ear Bud and adjust the Microphone location.

## The Auto Squelch Feature

Your M2X COMMUNICATOR is equipped with an automatic squelch system that automatically cuts off weak transmissions and unwanted noise due to terrain conditions and range limitations.

### The Automatic Power Save Feature

Your M2X COMMUNICATOR has a unique circuit designed to dramatically extend battery life. If it senses no transmission within 5 seconds, it automatically switches to the power save mode. The COMMUNICATOR can still receive transmissions in this mode.

### The Display Backlit Display Feature

Your unit's LCD Backlight display automatically lights up for 5 seconds with the press of any key.

## SPECIFICATIONS

Channels	22 FRS/GMRS Channels
Operating Frequency	UHF 462.5500 ~ 467.7125 MHz
Power Source	3 AAA size Alkaline Batteries with NiMH capability (not included)
Output Power	<b>0.093W</b> ERP maximum
Battery Life	Varies per user

### Channel and Frequency (MHz) Chart

Channel 1 thru 14 transmit on FRS frequencies  
Channels 15 thru 22 transmit on GMRS frequencies

Ch.	Frequency	Ch.	Frequency
1	<b>462.5625</b>	12	<b>467.6625</b>
2	<b>462.5875</b>	13	<b>467.6875</b>
3	<b>462.6125</b>	14	<b>467.7125</b>
4	<b>462.6375</b>	15	<b>462.5500</b>
5	<b>462.6625</b>	16	<b>462.5750</b>
6	<b>462.6875</b>	17	<b>462.6000</b>
7	<b>462.7125</b>	18	<b>462.6250</b>
8	<b>467.5625</b>	19	<b>462.6500</b>
9	<b>467.5875</b>	20	<b>462.6750</b>
10	<b>467.6125</b>	21	<b>462.7000</b>
11	<b>467.6375</b>	22	<b>462.7250</b>

## DAMAGED ANTENNA

Do not use any COMMUNICATOR that has damaged Antenna. If a damaged antenna comes in contact with the skin, a minor burn may occur.

## IMPORTANT BATTERY INFORMATION

- Only use battery which is indicated in the manual. Using another type of battery can substantially reduce play time
- If you plan on using your COMMUNICATOR for a month or more, be sure to remove battery because they can leak and damage the unit.**
- Dispose of battery in the proper manner, according to federal, state, and local regulations that apply in your area.
- Battery may leak electrolyte if mixed with a different battery type, if inserted incorrectly, if disposed in fire, or if an attempt is made to charge a battery not intended to be charged.
- Discard leaky batteries immediately. Leaking batteries can cause skin burns or other personal injury.

## FCC INFORMATION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received, including interference that may cause undesired operation

**Important:** Changes or modifications to this unit not expressly approved by XACT could void your authority to operate this unit. Your COMMUNICATOR is set up to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the COMMUNICATOR to exceed those limitations. Any adjustment to your COMMUNICATOR must be made by qualified technicians.

**To be safe and sure:**

- Never open your COMMUNICATOR's case.
- Never change or replace anything in your COMMUNICATOR except the battery.

Your COMMUNICATOR might cause TV or COMMUNICATOR interference even when it is operating properly. To determine whether your COMMUNICATOR is causing the interference, turn it off. If the interference goes away, your COMMUNICATOR is causing it. Try to eliminate the interference by moving your COMMUNICATOR away from the receiver. If you cannot eliminate the interference, the FCC requires that you stop using the COMMUNICATOR.

**Hazardous Environments:** Do not operate the COMMUNICATOR in hazardous environments. Explosion or fire may result. Do not operate the COMMUNICATOR near unshielded electrical blasting caps. Under certain conditions, COMMUNICATORs can interfere with blasting operations and may cause an explosion. Turn your COMMUNICATOR OFF to prevent accidental transmission when in a blasting area or in areas posted: "Turn off two-way COMMUNICATOR." Construction crews often use remote control RF devices to set off explosives.

**Care and Safety:** To clean the COMMUNICATOR, use a soft cloth dampened with water. Do not use cleaners or solvents because they can harm the body of the unit and leak inside, causing permanent damage. Use a dry, lint-free cloth to clean the

battery contacts. **Do not submerge the unit in water or attempt to use the unit on a wet environment.** If the unit gets wet, turn it off, and remove the battery immediately. Dry the battery and the battery compartment with a soft cloth to minimize potential water damage. Leave the battery compartment cover off overnight to ensure complete drying. Do not use the COMMUNICATOR until the unit is completely dry.

## TROUBLESHOOTING

SYMPTOMS	SOLUTION
No power	<ul style="list-style-type: none"> <li>Check the batteries. Ensure that the batteries are installed properly.</li> <li>The batteries may be weak.</li> <li>Recharge your batteries by using the A/C Adapter Charger.</li> <li>Your batteries may be damaged. Replace old batteries with new one</li> </ul>
Reception is weak	<ul style="list-style-type: none"> <li>Press the UP key to increase VOLUME.</li> <li>The receiving signal may be weak and/or out of range.</li> <li>Check the antenna position. For optimum performance make sure the antenna is pointing upright</li> </ul>
Cannot change channels	<ul style="list-style-type: none"> <li>To change channels, press the MENU key until the channel number flashes on the LCD Screen.</li> <li>Press the UP or DOWN key to change channels.</li> <li>Batteries may be weak.</li> </ul>
Range is limited	<ul style="list-style-type: none"> <li>Batteries may be weak</li> <li>Replace batteries if the BATTERY LEVEL indicator is low.</li> <li>The maximum range will vary depending on terrain and environment.</li> <li>Open fields provide the maximum range, while steel/concrete structures, heavy foliage, and use in buildings and in vehicles may limit the range significantly.</li> <li>Check the antenna position. For optimum performance make sure the antenna is pointing upright.</li> </ul>
Sound distortion problems	<ul style="list-style-type: none"> <li>If you are transmitting, speak in a normal tone of voice, 2 to 3 inches away from the MICROPHONE.</li> <li>If you are receiving, lower the volume to a comfortable level.</li> <li>COMMUNICATOR is too close. COMMUNICATOR must be at least 10 feet apart; increase your distance.</li> <li>COMMUNICATOR is too far apart. Obstacles interfere with transmission. Talk range is up to 2 miles in clear unobstructed conditions.</li> </ul>

## WARRANTY

### **XACT Products**

#### One-year Limited Warranty

This limited warranty sets forth all **XACT Products** responsibilities regarding to your M2X. There are no other expressed or implied warranties from **XACT Products**.

#### ***Warranty Service Provided***

If you purchased the M2X unit new from a retail vendor, **XACT Products** warrants the equipment against defects in material and workmanship for a period of one (1) year from the original date of purchase. This warranty is in lieu of all other express warranties. This warranty begins when you purchase the M2X unit and continues for one (1) year unless you sell or rent the unit, in which case the warranty stops.

**XACT Products** disclaims any implied warranty, including the warranty of merchantability and the warranty of fitness for a particular purpose, as of the date of one year from your original purchase of the M2X unit. **XACT Products** assumes no responsibility for any special, incidental, or consequential damages.

This warranty gives you specific legal rights and you may have other rights, which vary from state to state. Some states do not allow the exclusion or limitation of special, incidental or consequential damages or limitation on how long a warranty lasts, so the above exclusion or limitation may not apply to you.

#### ***Warranty Service Not Provided***

This warranty does not cover damages resulting from accident, misuse, abuse, improper installation or operation, lack of reasonable care, unauthorized modification, or the affixing of any attachment not provided by **XACT Products** with the M2X unit, and/or loss of parts. This warranty is voided in the event any unauthorized person opens, alters, or repairs the unit.

All **XACT** equipment being returned for repair must be suitably packaged.

**XACT Products** does not warrant that this equipment is compatible with the type of accessory of any particular COMMUNICATOR company or the service provided by it.

#### ***What To Do For Warranty Service***

During the first thirty (30) days, a defective product is eligible for over-the-counter exchange at the retailer from whom it was purchased. After thirty (30) days, the defective product should be returned to the authorized service center. the shipping address of the authorized service center is:

U.S. Electronics CONSUMER CENTER  
C/O Southern Bonded Warehouse  
7137 Southlake Parkway  
Morrow, GA 30260

Website – [www.uselectronics.info](http://www.uselectronics.info)

Your unit will be repaired or replaced if examination by the service center determines the unit is defective.

A M2X unit received damaged as a result of shipping will require you to file a claim with the carrier to cover repair costs.

A M2X unit received with missing parts or with damage due to abuse, inadequate packing, or some other noncompliance with this limited warranty will be returned to you C.O.D., freight collect.

NOTE: A M2X received which was not made for **XACT Products** or which is not defective as determined by our test procedures will not be repaired and will be returned to you C.O.D., freight collect.

#### ***To Obtain Warranty Service***

- Provide proof of the date of purchase within the package.
- Prepay all shipping costs to the authorized service center.
- Include a return shipping address within the package.

Please retain your sales receipt, the carton, the packaging materials, and the printed materials. the original carton is the best shipping container for the M2X unit should you have to return it.

**For your reference:**

Model Number \_\_\_\_\_

Date of Purchase \_\_\_\_\_

Name of Dealer \_\_\_\_\_

Customer Service Telephone Number  
1-800-864-2199

**FCC Licensing Information**

Channels 1 thru 14 transmit on FRS frequencies

Channels 15 thru 22 transmit on GMRS frequencies

Operation on GMRS frequencies requires a license from the federal Communications Commission (FCC)

Information regarding an application for your license can be obtained as follows if you intend to use the GMRS channels:

Website – <http://wireless.fcc.gov/prs/genmbl.html>

Tel.: 1-800-418-3676

**GMRS Licensing Information**

Before any station transmits on any channel authorized in the GMRS from any point within or over the territorial limits of any area where COMMUNICATOR services are regulated by the FCC, the responsible party must obtain a license for a GMRS system. An individual 18 years of age or older, who is not a representative of a foreign government is eligible to apply for a GMRS license. Application for a GMRS system license is made on FCC Form 605 and you can obtain a copy from the FCC's Web site: <http://www.fcc.gov/formpage.html> or by calling the FCC's Forms Distribution Center 1-800-418-4050 (3676), or from the fax -on-demand by dialing (202) 418-0177. There is a filing fee. For information on fees, see the FCC's Web site: <http://www.fcc.gov/csinfo/feeinfo.html>

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