

## **N-TOUCH GMRS COMMUNICATION SYSTEM**

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## **Introduction to Your N-Touch Communication System:**

Your snowmobile is equipped with a personal two-way radio communication system and intercom. This will enable you to keep in touch with other riders and to easily talk with your passenger. The communication system uses General Mobile Radio Service (GMRS) radio frequencies. GMRS is a land-mobile radio service available for short-distance two-way communications to facilitate the activities of an adult individual and his or her family members. The radio communication system on your snowmobile has an output power of two watts. Distance performance is dependent on the terrain, weather conditions and the antenna system.

This system requires professional installation by an authorized Polaris dealership. Repair and service should also be performed by your dealer.

*Note: For optimal performance it is important to follow the Set-up Instructions included in this book.*

## **Safety and General Information:**

*Read this information before using your radio for safe and efficient operation.*

### **Transmit Procedure:**

Your snowmobile has been equipped with a 2-way radio, meaning it can both transmit and receive radio frequency (RF) signals. To reduce your exposure to the RF signals, it is recommended that you do not transmit more than 50% of the time. By only using the transmission 50% of the time, you will be in compliance with the general population and uncontrolled environment exposure standards.

### **Antenna Information:**

The supplied antenna meets important product performance specifications and is an integral part of both FCC and Industry Canada compliance. Changing or modifying the antenna in any way could potentially damage the radio and violate FCC and/or Industry Canada regulations.

Avoid contact with the antenna when transmitting. This device meets the RF guideline FCC/OET 65 and Canadian health code 6 for mobile devices, which assumes installation provides an antenna distance of at least 20cm (8") from users and others.

### **General Use Information:**

Laws regarding the use of radios vary from state to state in the United States, and in Canada. Check the laws in the areas where you ride, and obey them. It is recommended that you give full attention to riding while using your radio. If the riding conditions dictate, pull over to make and receive transmissions.

### **Blasting and Potentially Explosive Areas:**

Do not use your radio in blasting zones or potentially explosive areas. These areas are generally marked with signs reading "TURN OFF 2-WAY RADIO", "BLASTING AREA", "BLASTING ZONE" or "POTENTIALLY EXPLOSIVE AREA". Using your communication systems in these areas can interfere with their operations.

## Licensing Requirements:

The Federal Communications Commission (FCC) requires General Mobile Radio Service (GMRS) operators to obtain a license prior to operating GMRS radios.

**Both form 605 and 159 are required for the license.** These forms can be requested from the FCC at the following numbers:

|                            |                |
|----------------------------|----------------|
| For Fax Requests:          | 1-202-418-0177 |
| Mail Requests              | 1-800-418-3676 |
| FCC GMRS License Questions | 1-888-225-5322 |

The forms can also be completed online at [www.fcc.gov](http://www.fcc.gov).

Modifications to this product by persons not deemed qualified by the manufacturer will void the warranty and may void the user's FCC license to use this product.

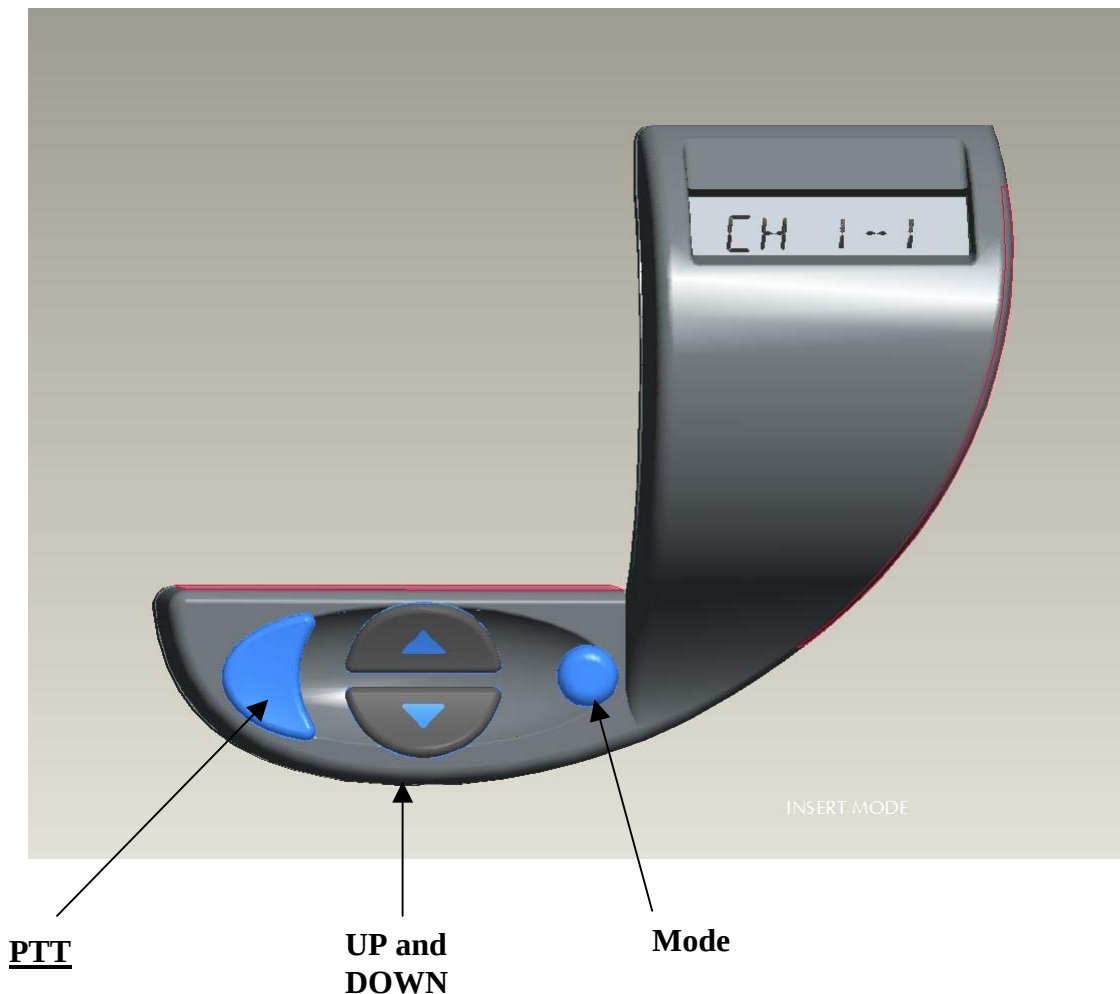
No license is required for use in Canada.

## GMRS Frequency Allocation:

It is possible to use a GMRS radio from another manufacturer to communicate with your Polaris communication system. The user manual for the other product can be compared for channel compatibility by using the frequency chart below. For example, the Polaris radio uses channel 1 to transmit at 462.5625 MHz, while some handheld radios may use channel 15 for 462.5625. The following chart shows the signal frequency for transmitting (TX) and receiving (RX) radio frequencies.

| <u>Channel</u> | <u>TX/RX Frequency (MHz)</u> |
|----------------|------------------------------|
| 1              | 462.5625                     |
| 2              | 462.5875                     |
| 3              | 462.6125                     |
| 4              | 462.6375                     |
| 5              | 462.6625                     |
| 6              | 462.6875                     |
| 7              | 462.7125                     |
| 8              | 462.5750                     |
| 9              | 462.6250                     |
| 10             | 462.6750                     |
| 11             | 462.5500                     |
| 12             | 462.6000                     |
| 13             | 462.6500                     |
| 14             | 462.7000                     |
| 15             | 462.7250                     |

## Sea Hero Handle Bar Controls and Display



**PTT:** Pushing the Press to talk (PTT) button places the transceiver in transmit mode.

**MODE:** Allows you to cycle through the functions of the communication system. The functions in order are as follows: Channel, Code, Front/Rear Volume (F/R), Voice Activation Sensitivity (VOX). After a few seconds of inactivity the mode will revert back to volume. If the MODE button is held down, the receiver goes to monitor mode, which opens up the receiver to anything operating on that channel regardless of the code. This allows the operator to see if anyone is transmitting on the channel before transmitting with codes.

**UP:** This button controls volume up. When you are in a different mode it will allow you to increase the selection.

**DOWN:** This button controls volume down. When you are in a different mode it will allow you to decrease the selection.

## **Communication System Display**

Under normal operation the channel and the code is displayed. If PTT is pressed, then TX with the channel number is displayed. If mode is pressed, the channel number is displayed and can be changed by hitting the UP or DOWN arrow keys.

## **Setting up your Communication System:**

The communication system will be initialized when the ignition is turned to the “on” position. The right side of the display will show the last channel that was selected. On the left side of the display, there will be a bar graph indicating the rider’s volume level.

### **Adjusting the Rider’s Volume:**

Use the UP or DOWN button to adjust the rider’s volume level to the desired level. The volume level is displayed on the LCD in numeric levels of 0 to 30, with 0 being off and 30 is the maximum volume.

### **Channel Selection:**

From the rest state of the radio press the Mode button once; the word CHANNEL will appear under the channel number in the display. Use the UP or DOWN button to select the desired channel. Your radio has 15 channels from which to choose.

### **Interference Elimination Code Selection:**

The INTERFERENCE ELIMINATION CODE (a.k.a. Continuous Tone Coded Squelch System: CTCSS) prevents radios that use different codes from being heard on your communication system. These codes do not make your conversation private. When the code is set at “0”, you will be able to hear all transmissions on the selected channel. You will only be able to transmit to other riders using the same channel and code “0”.

### **To Select the Interference Elimination Code:**

From the rest state of the radio press the Mode button twice; the word CODE will appear under the number in the display. Use the UP or DOWN button to select the desired interference elimination code. Your radio has 38 codes available; these codes correspond with those used on handheld GMRS radios.

*Note: For optimal performance it is important to have everyone within the riding group set their systems to the same **CHANNEL** and **INTERFERENCE ELIMINATION CODE**.*

### **Adjusting the Passenger’s Volume:**

From the rest state of the radio, press the Mode button three times. F/R will be shown on the display. Use the UP or DOWN button to adjust the passenger’s volume level to the desired level. The volume selected for the passenger is based on the rider’s selected volume level. If the rider has their volume at a low volume, the passenger’s audio can be equal to, higher or lower than the rider’s selected volume level. When making adjustments to the passenger’s volume, the left side of the display shows a number between –9 and 9 indicating the volume level. More bars indicate a higher volume level. At 0 the passenger and the rider’s headset volumes are equal. The level of 9 will have the passenger’s volume much louder than the driver’s while –9 volume is much lower.

*Note: For optimal performance of the intercom system it is important to follow the set-up procedure on the following page.*

### **Setting up your Communication System Continued:**

#### **Intercom and Voice Activation Sensitivity (VOX):**

Your system includes a voice activated intercom system for rider to passenger communication. Voice activation allows the rider and passenger to have a conversation by simply speaking into the microphone. The voice activation sensitivity (VOX) level is adjustable to enhance the performance of the intercom.

*Note: For optimal performance of the intercom system it is important to adjust the VOX sensitivity. Additionally, the microphone must be positioned directly in front of your mouth.*

#### **Adjusting the Voice Activation Sensitivity (VOX):**

Press the Mode button four times. VOX will be seen in the display. Use the UP or DOWN buttons to adjust the VOX Sensitivity. Sensitivity levels can be set from 0-10 with "0" being the most sensitive. If your VOX is set at "0", your microphone will be constantly open and transmitting over the intercom. A VOX setting of "0" may cause wind noise and engine noise to interfere with normal operation of the intercom.

For optimal performance when using the intercom, it is best to set the VOX sensitivity to a level that matches your individual speech pattern and voice level. People who have a softer speaking voice will need a lower VOX sensitivity level number.

### **Using your Communication System:**

#### **Transmit Information:**

Once your communication system has been set-up, the PUSH TO TALK (PTT) button on the handle bar can be used to transmit to other riders in your group. Before transmitting listen to the intended channel to see if other riders outside of your group are using the channel. This can be done using the monitor mode. Press and hold the MODE button, and if someone is using the channel and is using a different Interference Elimination Code, you will hear their transmissions. You may want to select a different channel and interference elimination code.

When the PUSH TO TALK (PTT) button on the handle bar control is pressed, the display will TX with the channel number. Press and hold the button while you are speaking into the headset microphone. Release the PTT to receive a transmission from another rider.

#### **Auxiliary Input Jack:**

To listen to portable audio devices (such as MP3, AM/FM radios, or CD players) through the communications system, there is a port available for auxiliary input. Simply use a standard 3.5 mm audio patch cord (male to male) to plug in your audio device. The 3.5mm audio patch cords should be available at your local electronics store. The audio device will play automatically when connected.

*Note: Audio output levels vary by portable device. It may be necessary for you to increase the volume on your personal audio device to get maximum volume from the sound system.*

### **Troubleshooting Tips:** TBA

