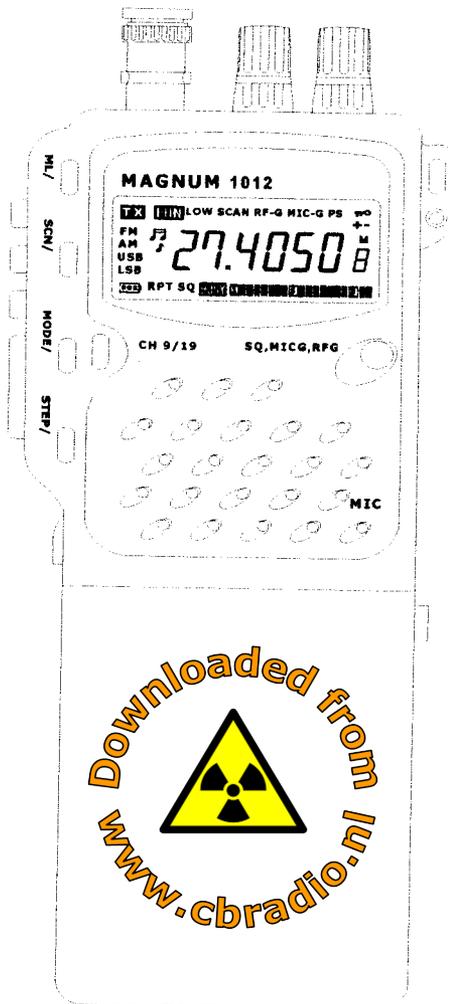


# MAGNUM 1012

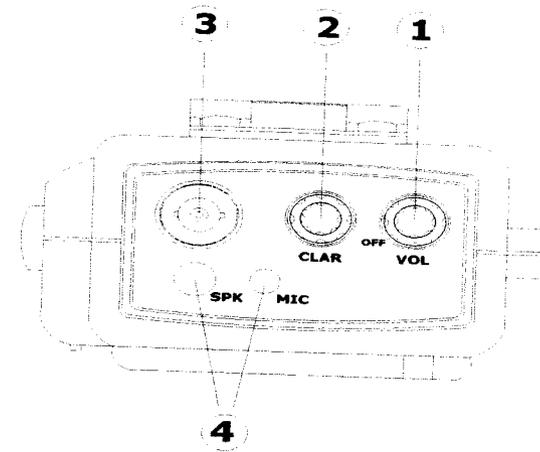
## INSTRUCTION MANUAL



SR. TRANSCEIVER PHILS INC.

## OPERATING CONTROL AND FEATURES

### Top Panel Features



**1. Off/On, Volume:** Turn this button clockwise to turn power on and set desired listening volume.

**2. Clarifier:** Allows variation of the received frequencies above and below the channel frequency, although this control is intended primarily to tune in SSB signals.

**3. Antenna Connector:** This radio uses a BNC type connector for use with the supplied custom flexible antenna this antenna provides good performance given its overall size. However, longer antennas will substantially increase the users distance with the radio.

**4. Microphone and Speaker Jack:** 2.5mm and 3.5mm jack for connection of optional speaker microphone accessory.

**Dual Cover:** When speaker/microphone is not being used, this prevents dirt and water from getting inside the CB.

## OPERATING CONTROL AND FEATURES

### Side and Back Panel Features

**1. Function Button (Func):** This button allows for activation of the secondary feature in each of the front panel of the radio. The features that are activated by the FUNC button are those that are in the blue letters. These features are the following: SHIFT, RPT, MIC-G and LOCK. In addition, the "Hi/Low" power function is controlled by the "FUNC" button.

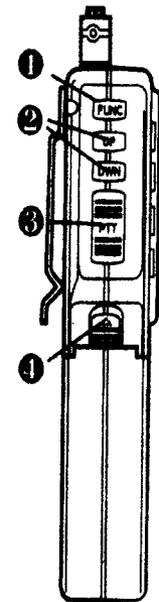
**2. Frequency Up/Down Buttons:** When pressed, these buttons are used to select any one of the amateur band desired. Press the "UP" arrow to move to a higher frequency than is currently shown on the display. Press the "DWN" arrow to move to a lower frequency than is currently shown on the display. In either the "UP" or "DWN" mode, when you press and hold the frequency button for longer than one half of a second, the frequency will continuously move to the next until you release the button.

**3. Push-To-Talk (PTT) switch:** The receiver and transmitter are controlled by the push-to-talk switch. Press the switch and the transmitter is activated: you can now send a message. To receive, release the push-to-talk switch. When transmitting, hold the unit two inches from your mouth and speaker grill area.

**4. Battery Pack Latch:** Sliding this button up in its tracks allows the battery case to be removed once it is placed on the radio.

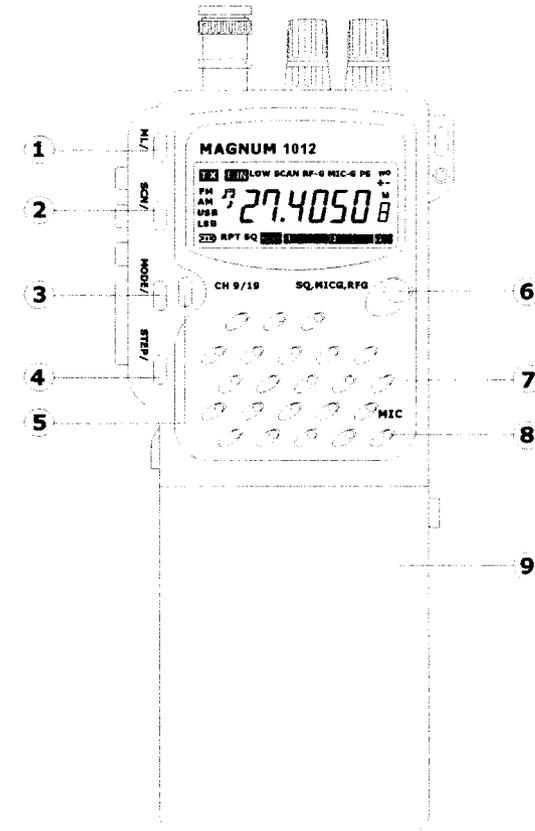
**5. Belt Clip:** Allows for ease of carrying while attached to user's belt.

**6. Flexible Wrist Strap:** Place strap around the wrist to prevent the unit from falling to the ground in the event it falls out of user's hand.



## DESCRIPTION OF FEATURES (CONT)

### Front Panel Features



**1. M.save and M.load Functions:** This feature allows the user to save and recall specific frequency and operating mode. See Memory programming and Recall instructions.

### Memory Programming "M1 to M5"

1. Using "UP/DOWN" buttons select the desired frequency and mode to be saved.
2. Press and release "FUNC" button and then press the "ML/MS" button, notice the "M" icon blinking on the right side on the display.

3. Then press "SCAN/MENU" button to save in memory M1.

4. Repeat procedures 1 and 2 and save it to "MODE / H/L" button for memory M2, "STEP / CH/FREQ" button for M3, "CH9/19 / LOCK" button for M4 and "SQ, MICG, RFG /RPT" for M5.

#### **Memory Recall "M1 to M5"**

1. M.save and M.load Functions: This feature allows the user to save and recall specific frequency and operating mode. See Memory programming and Recall instructions.

1. Press ME/MS button and then SCAN / MENU button to recall memory M1.

2. Press ME/MS button and then MODE / H/L button to recall memory M2.

3. Press ME/MS button and then STEP/ CH/FREQ. button to recall memory M3.

4. Press ME/MS button and then CH9/19 / LOCK button to recall memory M4.

5. Press ME/MS button and then SQ, MICG, RF-G/ RPT button to recall memory M5.

**2. Scan:** Allows the radio to automatically scan through all frequency, stopping at any frequency that is busy with signals being communicated. It will remain on that frequency during the conversation, and will not reactivate scanning until roughly 5 seconds after the communication signal has ended. To activate, press the "SCN/M/SCAN" button. The word SCAN will appear on the display. To stop, press the "SCN/M/SCAN" button again.

**M/SCAN:** This feature allows the user to scan all the 5 saved channels to the memory. To Turn it "on", press the "Func" button first and then followed by the "SCN/M/SCAN" button. To Turn-Off: Performed same procedure as mentioned above.

**Shift offset Frequency:** To access press the "SCN/M/SCAN" button for 3 seconds or more, the shift frequency will appear on the display, then use the "up" and "down" button to select the desired shift frequency from 0 to 990 KHz. This function only activated when the unit is in mode 1 (ham band) operation.

**3. Mode:** Allows selection between the four operational modes of the radio (AM/FM/USB/LSB). To select your desired mode, press the "Mode" button until you see the mode in which you desired. The order of appearance is FM then AM, then USB, and then LSB.

**Selectable Hi/Low Power:** The unit has been designed with proprietary circuitry that gives superior transmitting performance and gives the user the ability, depending on the usage application they are in, to select between two power levels. Low power output mode will give the user significantly longer battery life estimated twice as long as when in the full power mode. It is recommended that when you only need a range of 1/2 mile or less, the "low" position would provide more than adequate output power. If you need distances greater than that, leave the radio in the "Full" power mode.

#### **To Change the Power Output Level:**

A) Press and release the "Func" button.

B) Then press and release the "MODE/H/L" button. The word "Low" will appear on the display. The power out level is now 1 watt on the AM/FM mode. This is recommended when communicating in short range, such as around 1/2 mile or less.

C) To return to full power, simply press the "Func" button again, followed by the "MODE/H/L" button. This will return the radio to the full power position, which is 4 watts in AM/FM.

**4. Step:** This button is used for select one of the frequency step (1 KHz, 10 KHz and 100 KHz).

**"+"and"- Shift Function:** This function allows the user to activate the shift offset frequency and transmit higher or lower than displayed or receive frequency. To activate, press the "Func" button first, followed immediately by the "STEP/CH.FR" button. The sign "+" will appear on the display, now the unit will transmit higher than receive frequency. To transmit lower than receive frequency, repeat the same procedure until the "-" sign appear on the display. To disengage these operations repeat

same procedure until "+"and "-" sign disappear. This function activate when the unit is in mode 1 (ham band) operation only.

**Frequency display:** This button allows the user to show up the channel frequency of the selected channel on the LCD display. To activate just press "Func" button first and then followed immediately by "STEP/CH.FR"

**5. CH 9/19:** This special channel is used by CB community for emergency and calling channel. To activate this special frequency just press "CH9/19/LOCK" button then the operating frequency automatically reset to this frequency. Each time you press this button the blinking display change to 9 and 19 then back to previously selected frequency. This button also use for selecting band channel when the unit is in Full Band mode of operation.

**Call:** For Call monitoring on call frequency 29.300MHz, just press "CH9/19 LOCK" button. 29.300 flashes appear on the display, press the mentioned button again, the flashes appear on the display change to 29.600 and the transceiver stays on frequency 29.300MHz and 29.600 as what have selected. To release Call monitoring, press "CH9/19 LOCK" button. The previously selected frequency appears on the display. This function only activated when the unit is in mode 1 (ham band) operation.

**Lock:** The LOCK feature allows the user to "LOCK" virtually all of the button features on the radio so that once they are set, they can not be activated. This will prevent the radio from having its operation modes changed once the user has them set the way they like. To activate, press the "FUNC" button, followed by the "CH9/19 LOCK " button. The word "On" will appear on the display. With this feature activated, the only buttons that will work are the Light (longer than 1 second the "Func" button) and the PTT (Transmit) button. To deactivate, simply press the "Func" button again, followed immediately by the "CH9/19 LOCK " button.

**6. Squelch:** Used to eliminate background or "white" noise when monitoring strong signals. To activate the squelch control press "SQ, MICG, RFG/RPT" button and then use the "up" and "down" button to set the desired point where the background noise is just eliminated.

**MIC-G (MIC-Gain) :** When activated, the MIC-G feature actually adjusts the microphone gain in the transmit mode, On the unit activating the MIC-Gain feature would have its best application when the user has a very strong, "booming" voice tone that would create a distorted signal going into the microphone, because this situation will only occur in rare situation. Mic-Gain feature in maximum position give the user to its maximum sensitivity.

**To Turn-On,** press the "SQ, MICG, RFG/RPT " button 2 times until the word 'MC-G" will appear on display. Then use the "up "and "down" button to increase and decrease microphone amplifier gain.

**RF-G (RF Gain):** Allows optimizing the incoming signal. To activate, press "SQ, MICG, RFG/RPT" button 3 times until the word "RF-G" appear on the display. Use "up" and "down" button to increase and decrease the receiver sensitivity. Activating the "RF-G" feature helps to attenuate very strong signals that are produced from another radio that is in very close proximity to the unit. Turning this feature to maximum position creates full receiver sensitivity.

**RPT:** Repeater access tone on and off control. Most repeaters require an 88.5 Hz tone burst to access. To activate the 88.5Hz tone burst, press the "Func" button and then the "SQ, MICG, RFG/RPT " button .RPT will appear on the LCD display indicating that the tone burst now automatically be transmitted whenever the PTT is pressed. To deactivate, repeat the same procedure. This function activated when the unit is in mode 1 (ham band) operation only.

**7. Speaker:** High quality, impact resistant output speaker for clear output reception.

**8. Electronic Microphone:** Front mounted, electrostatic condenser microphone for clear high quality transmission power. You should hold the radio 2-4 inches from your mouth and speak in a normal voice.

**9. Battery Case:** Slide on battery case, which contain 9 "AA" batteries. (See "batteries" for installation instructions). We recommend only using AA Ni-Cads in this radio.

**Special Function:**

**Multi mode Channel:** this feature allows the user to convert the radio to multi channels.

**A. Codes and its Corresponding Mode Channel**

- Code1: HAM BAND (AM/FM/SSB 4W)
- Code2: 12M (AM/FM/SSB 4W)
- Code3: 450ch. (AM/FM/SSB 4W)
- Code4: 450ch. (AM/FM/SSB 4W "0" Raster 0 Raster)
- Coded: Germany (80 FM4W; 40 AM 1W and SSB 4W).
- CodeEU: 40AM 1W, 40 FM/SSB 4W
- CodeE: 40Ch. AM/FM/SSB 4W
- CodePL: 40ch. AM/FM/SSB 4W "0" Raster
- CodeU: UK; U1—1to 40; U2—1to 40
- CodeUS: 40 ch. (AM/SSB 4W)

\*Frequency display is not necessary for UK mode

**B. Channel Conversion option of Code: d, EU, E, PL, U and US only**

1. Turn Off the unit (Volume switch off)
2. Press ML/MS button & hold
3. Turn ON the unit
4. Release ML/MS button
5. The display will show the code: d, EU, E, PL, U and US.  
And then press the "UP/DOWN" buttons to select the desired code.
6. Turn OFF the unit to set the selected code
7. Turn ON the unit to operate on the selected code

**C. Channel conversion from code: 1 to Code: US**

1. Turn OFF the unit
2. Open the PTT button.
3. Below the PTT switch that found inside the PTT button there are five terminals provided for conversion. Terminal 1,2,3,4 and 5.



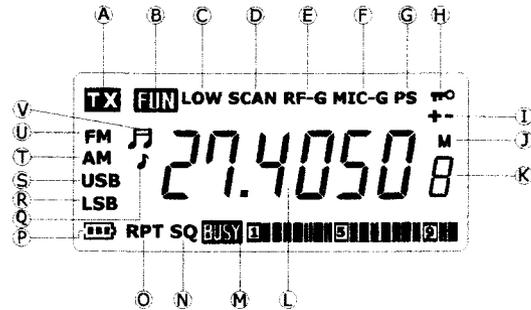
4. By using a tweezers short terminal 1&2 and then simultaneously turn on the unit, take out the tweezers connected to terminal 1 & 2 only after the code icon appeared on LCD display or else conversion process is not in effect.
5. Use "UP/DOWN" button to select the desired code from Code 1 to code US.
6. After selecting the desired code turn "OFF" and then "ON" the unit to operate it on the selected code.
7. To lock all the codes, connect terminal 2, 3 and terminal 4, 5 permanently.

**BEEP Tone and Roger Beep:** To enable the beep tone and roger beep, press and hold the "SCN/ M/SCN" button for 3 sec. The display show up the bp icon, press SCN/ M/SCN button once again to activate the roger beep, the bp icon change to Rgb then use the UP/DOWN button to turn ON and OFF of beep and Roger beep sound.

**Display Lamp:** Provides lighting of entire digital liquid crystal for use in the dark or night time application. The display lamp will automatically on as you turn on the unit and it automatically off with in 8 sec. To turn on back the display lamp just presses the "Func" button for 2 sec. and again it just stays "on" for 8 sec. and if you want to turn it off just repeat the same procedure.

## Display Panel Features

Illustrated below are all the VISUAL INDICATORS that appear on the display, and the corresponding feature function that they associate with:



**Liquid Crystal Display Panel:** The state of the art liquid crystal panel provides the user with a visual information center on the operation and status of the unit.

**CAUTION:** Due to the components inherent in them, liquid crystal displays should not be subjected to extremes of temperature or humidity. If the unit is exposed to temperatures below -20t (-5°F) or above +60t(+140°F), the display may temporarily cease to function properly, and in some cases, could result in permanent damage. Do not subject radio to extreme conditions, such as a closed automobile in direct sunlight or continuous sub-zero temperatures.

All liquid crystal displays have a preferred viewing angle when the display contrast is at a maximum. The best viewing point will vary by user, depending on such variables as temperature, humidity, battery condition, and the actual users' eyesight.

**A. TX:** Indicates that radio is in the "transmit" mode.

**B. Function Mode:** Indicated the "FUN" button has been selected, which allows for operation of many of the "transmit" mode.

**C. Low:** Indicates that user has selected the Low power output mode. When the indicator is not shown, radio is in full output mode.

**D. Scan:** Indicates that the radio is in the Scan mode, which works in conjunction with all amateur bands.

**E. RF-G:** Indicates that the RF-G feature has been activated.

**F. MIC-G:** Indicates that the Mic-Gain feature has been activated.

**G. PS:** Indicates that the Power save feature has been activated.

**H. OTT:** Indicates the key lock feature has been activated.

**I. "+/-":** Indicates + and – shift mode.

**J. "M":** Indicates that the Memory feature has been activated.

**K. Memory Location:** Indicates that the Memory location feature has been activated.

**L. CH/Frequency Indicator:** Displays the corresponding channel / frequency, in which the radio is operating on.

**M. Busy Output Meter:** Your unit incorporates an eighteen segment incoming signal and power output meter in the liquid crystal display panel.

**When receiving a signal,** the meter will indicate how strong the signal is. A weak signal will be indicated by five or seven segments, while a very strong signal will have 9 or more segments.

**When transmitting,** the letter "TX" will appear on the display. If the radio is operating in the HIGH power position, 9 to 10 segments will be displayed, depending on the condition of your batteries. If the radio is operating in the LOW power position, only 3 to 5 segments will appear.

**N. SQ:** Indicates that the squelch feature has been activated.

**O. RPT:** Indicates that the RPT feature has been activated.

**P. BATT:** Indicates batteries are getting low.

**Q. Beep Tone:** Indicates that the beep tone feature has been activated.

**R. LSB:** Indicates lower side band mode operation.

**S. USB:** Indicates upper side band mode operation.

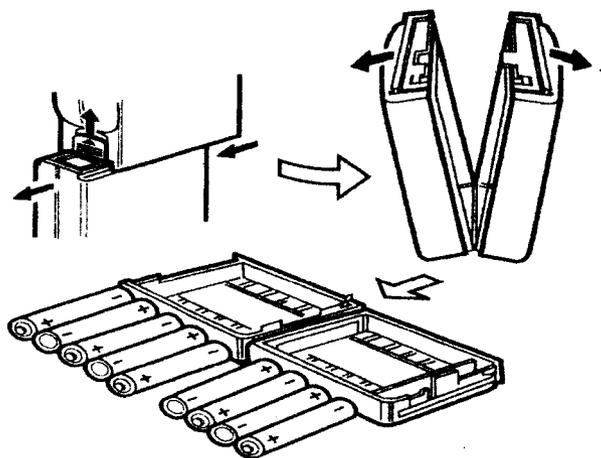
**T. AM:** Indicates AM mode operation.

**U. FM:** Indicates FM mode operation.

**V. RGB Tone:** Indicates that the Roger beep tone feature has been activated.

## BATTERY PACK INSTRUCTIONS

For maximum power output and performance from the unit, we strongly recommend that you only use "AA" Ni-Cad batteries in your battery pack. Due to the voltage rating and power consumption of the radio, Ni-Cad's deliver superior performance and life than alkaline. These batteries are readily available from your radio dealer or other electronic stores. While the radio will work with alkaline batteries, you will definitely not achieve full transmit power or length of talk time on each set of batteries when compared to Ni-Cad'. The battery pack supplied with the radio is a slide on battery case that requires 9 "AA" size batteries (preferably Ni-Cads) To install the 9 batteries into the case, hold the pack in one hand, while at the same time using your other hand to press down on the center tab (see illustration). The pack will open into two distinct pieces, with polarity markings for batteries to install on each side. Please pay attention to the polarity markings, as incorrect battery installation can damage the radio.



**IMPORTANT:** When the batteries voltage become low, in addition to the "Battery Low" indicator coming on the display, you will experience a BLANK DISPLAY when you press the PTT button. This is due to the needed voltage being greater than the power you have left in the battery pack. This "Blank Display" situation is a normal reaction to the batteries becoming low. Please replace or re-charge to batteries immediately when these situations occur.