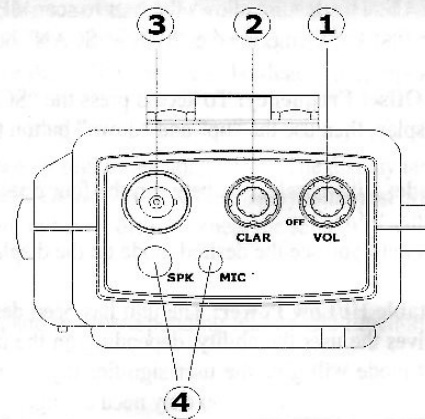


## OPERATING CONTROL AND FEATURES

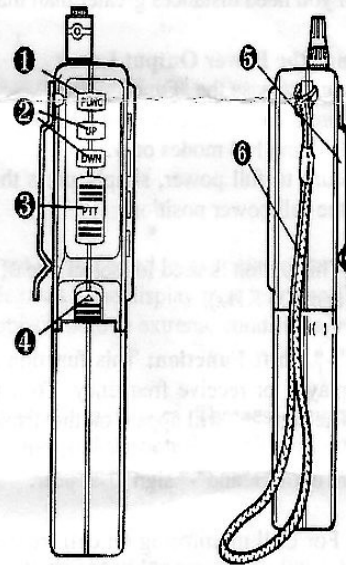
### Top Panel Features

- 1. Off/On, Volume:** Turn clockwise to turn power on and set desired speaker volume level.
- 2. Clarifier:** Allows variation of the receive frequency above and below the set frequency. This control is intended primarily to tune in SSB signals.
- 3. Antenna Connector:** The Magnum 1012 uses a BNC type connector for use with the supplied flexible antenna. The stock antenna provides good overall performance given its size.
- 4. Microphone and Speaker Accessory Jack:** 2.5mm and 3.5mm jack for connection of optional speaker microphone and headset accessories.



### Side and Back Panel Features

- 1. Function Button (Func):** This button allows for activation of the secondary features, marked in blue text on the front panel controls. To activate a secondary feature press the FUNC button (the function indicator "FUN" will appear on the LCD), then press the desired control button.
- 2. Frequency Up/Down Buttons:** When pressed, these buttons are used to select the desired operating frequency. Press UP to move up in frequency and DWN to move down in frequency.
- 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. To receive, release the push-to-talk switch. When transmitting, hold the unit approximately two inches from your mouth.
- 4. Battery Pack Lock:** Slide this lock up to remove the battery pack from 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 accidental dropping of the radio while holding.



### Front Panel Features

- 1. Memory Load (ML) and Memory Save (MS) Functions:** This feature allows the user to save and recall specific frequency and operating modes. See Memory Programming and Recall instructions.

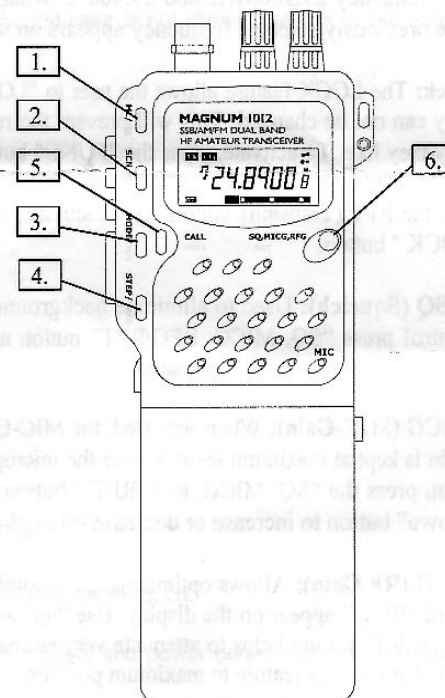
#### Memory Programming "M1 to M5"

1. 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 / FREQ" button for M3, "CALL / LOCK" button for M4 and "SQ, MICG, RFG / RPT" for M5.

#### Memory Recall "M1 to M5"

1. Press ML/MS and then SCAN / MENU button to recall memory M1
2. Press ME/MS and then MODE / H/L button to recall memory M2
3. Press ME/MS and then STEP/ CH/FREQ. button to recall memory M3
4. Press ME/MS and then CH9/19 / LOCK button to recall memory M4.
5. Press ME/MS and then SQ, MICG, RF-G/ RPT button to recall memory M5.

- 2. Scan:** Allows the radio to automatically scan through all frequencies, 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 approximately 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 activate this feature, press the "Func" button first and then press the "SCN/M/SCAN" button. To turn off, repeat steps.

**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.

**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 desired mode on the display.

**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 AM and FM modes only.

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.

**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.

**5. 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.

**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 changed. 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 symbol "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. SQ (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.

**MICG (MIC-Gain):** When activated, the MIC-G feature adjusts the microphone gain in the transmit mode. Typically the MIC Gain is kept at maximum level. Lower the microphone gain if you find that your transmitted audio is distorted. To adjust MIC gain, press the "SQ, MICG, RFG/RPT " button 2 times until the word 'MC-G' appears on display. Then use the "up "and" "down" button to increase or decrease microphone amplifier gain.

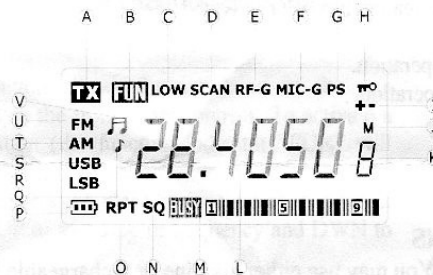
**RF-G (RF Gain):** Allows optimizing the incoming signal. To activate, press "SQ, MICG, RFG/RPT" button 3 times until the word "RF-G" appear on the display. Use "up" and "down" button to increase and decrease the receiver sensitivity. Activating the "RF-G" feature helps to attenuate very strong signals that are produced from another radio that is in 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 will now automatically be transmitted whenever the PTT is pressed. To deactivate, repeat the same procedure.

**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 and function:



**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 5 degrees F or above 140 degrees 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 "FUNC" button has been selected, which allows for operation of the secondary functions.
- 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.
- 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. Frequency Indicator:** Displays the corresponding 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.

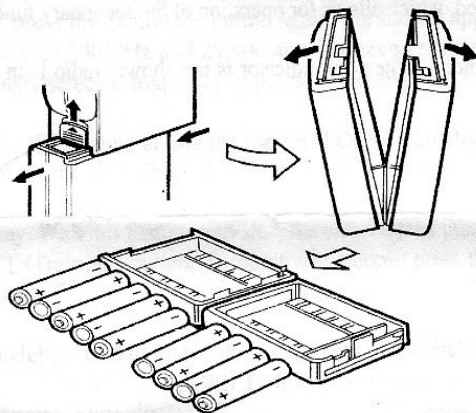
**U. FM:** Indicates FM mode operation.

## BATTERY PACK INSTRUCTIONS

The Magnum 1012 uses 9 AA batteries. You may use either alkaline or rechargeable batteries.

**IMPORTANT:** *Never use different battery types in the same battery pack! If rechargeable batteries are used, you will need to use a battery charger supplied by the battery manufacturer for charging. You will not be able to charge the batteries while in the Magnum 1012 battery pack.*

The Magnum 1012 battery pack slides on to the bottom of the radio. To remove the battery pack from the radio, push up on the battery pack lock (located on the side of the radio) and slide the battery pack off the radio towards the lock (see illustration). To open the pack carefully lift up on the plastic tab on the top of the battery pack and pull the 2 halves of the pack apart (see illustration). When installing the batteries, please pay attention to the polarity markings, as incorrect battery installation can damage the radio.



**IMPORTANT:** When the battery voltage is low, in addition to the "Battery Low" indicator coming on the display, you will experience a BLANK DISPLAY when transmitting. This is due to there not being enough voltage remaining in the batteries. The blank display is normal operation for the Magnum 1012 when the batteries are too low. Please replace or recharge the batteries immediately when this occurs.