HL-1000

OWNER'S MANUAL

Land Mobile Radio

HL-1000

HEADLINE

www.headline.co.kr

SAFETY TRAINING INFORMATION

Your FM radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as "Occupational Use Only", meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards. This radio is NOT intended for use by the "General Population" in an uncontrolled environment.

This radio has been tested and complies with the FCC RF exposure limits for "Occupational Use Only". In addition, your FM radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields. American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3kHz to 300GHz.

American National Standards Institute (c95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields-RF and Microwave.

The following accessories are authorized for use with this product. Use of accessories other than those specified may result in RF exposure levels exceeding the FCC requirements for wireless RF exposure.; Li-Ion Battery Pack (BP-227), Belt Clip (BC-98), and External Speaker-micro phone (HM-138).

To ensure that your expose to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines:

DO NOT operate the radio without a proper antenna attached, as this may damaged the radio and may also cause you to exceed FCC RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or antenna specifically authorized by the manufacturer for use with this radio.

DO NOT transmit for more than 50% of total radio use time ("50% duty cycle"). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the "TX indicator" lights red. You can cause the radio to transmit by pressing the "PTT" switch.

ALWAYS keep the antenna at least 2.5cm (1inch) away from the body when transmitting and only use the FM radio belt-clip which is listed on page vi when attaching the radio to your belt, etc., to ensure FCC RF exposure compliance requirements are not exceeded. To provide the recipients of your transmission the best sound quality, hold the antenna at least 5cm (2inch) from your mouth, and slightly off to one side.

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The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to assure that this radio operates with the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility
During transmissions, your FM radio generates RF energy that con possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so.
DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Occupational/Controlled Use
The radio transmitter is used in situations in which persons are exposed as consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

1. Product Feature

1. Miniaturization & Lightweight
We minimize the size and weight of radio so we can maximize portable convenience.

2. Various functions for user
User can choose various functions easily ; for example, the adjustment of reception, VOX, etc.

3. Battery Capacity
High safety and great capacity of Li-ion Battery increases the usable battery life.

4. Security
PIN function of the radio can prevent people from using your radio without permission.

5. Calling
Personal/Group calling function help the users to call each other.

2. Main Products

Please check the below accessories when you buy the radio and call the store immediately where you buy it if you find any defects.

UNIT	ANTENNA	BATTERY PACK	BELT CLIP

HAND STRAP	CHARGER	ADAPTER	MANUAL

3. Optional Accessories

You can use the radio when you buy the optional accessories.
(Pictures of the accessories depend on the models)

EAR MICROPHONE	A LARGE BATTERY PACK	EXTERNAL MIC

LEATHER CASE	DATA CABLE	CLON JACK

4. Controls and Indicators

3)Battery pack

1)On/Off
&
Volume knob

2)External Ear/Microphone Jack

4)Antenna

5)PTT button

6)Battery door latch

7)Belt clip

8)Monitor button

9)LED Indicator

10)Speaker

11)MIC

12)LCD

13)Down/Up Button

14)Button Function

CH-199

1. On/Off & Volume knob
Rotate the On/Off & Volume knob clockwise to turn on the radio, the power will be turned on. You can adjust the volume level by turning the Volume knob.

2. External Ear/Microphone Jack
You can plug the external Ear/Microphone to the Ear/Microphone Jack. The internal MIC and Speaker don't work when you use the external Ear/Microphone.

3. Battery pack
High safety and great capacity of Li-ion Battery increases the usable battery life.

4. Antenna
You can put in/out the antenna by turning the antenna screw.

5. Transmit
You can transmit by pressing the PTT button and you can receive signals by releasing the button.

6. Battery door latch
You can put in/out the battery by pulling down the battery door latch.

7. Belt clip

8. Monitor button
You can remove the noise squelch or tone squelch with the monitor button when you receive the weak signals.

9. LED Indicator (RX/TX LAMP-3 COLOR)

Red	on	Transmit
	off	Low Voltage
Green	on	Receive. Monitor in operation
	off	When sub-tone is different in receiving
Yellow	on	Transmit Selcall

10. Speaker

11. MIC

12. LCD
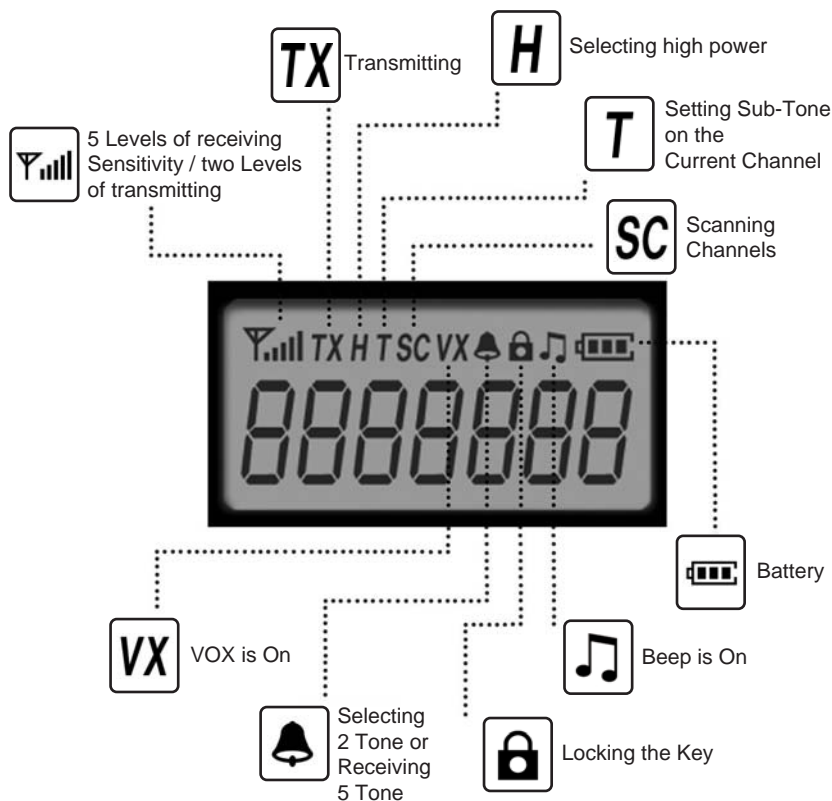LCD indicates the functions choice state and operation state.

13. Down/Up Button
You can use the down/up button when you change the channels and functions.

14. Function Button
You can select various additional functions.

5. LCD Display Panel

TX Transmitting

H Selecting high power

T Setting Sub-Tone on the Current Channel

5 Levels of receiving Sensitivity / two Levels of transmitting

SC Scanning Channels

Battery

VX VOX is On

Beep is On

Selecting 2 Tone or Receiving 5 Tone

Locking the Key

6. Operation

1. Basic Operation

Rotate the On/Off & Volume Knob.

(1) On/Off & Volume Knob
Rotate the On/Off Power & Volume knob clockwise to turn on the radio, the backlight will be turned on. All icons will appear on the LCD for a second, and the beep will sound to confirm that the radio is on. You can adjust the volume by turning the Volume knob.

Select the channels using the Up/Down button.

(2) Channel
You can select the channels using the Up/Down button. At this time, you can press the Up/Down button for over 2 seconds for fast advance.

The signal will be received after selecting a channel.

(3) Receive
The signal will be received after selecting a channel. You can communicate each other by adjusting volume. When the beep sound occurs, the green LED will be on and 5 levels of the sensitivity will be indicated on the LCD.

Select a channels using the Up/Down buttons.

(4) Transmit

Select a channel using the Up/Down buttons. Press and hold the PTT (push to talk) button and speak into the microphone. Red LED will be on and the transmission icon will appear on the LCD. You can select High/ Low Power with the Down/Up button by pressing and holding the PTT button.

Press the 'M' button shortly to monitor the channel.

(5) Monitor

You can verify if the channels are out of service by releasing the squelch. Press the 'M' button to monitor. Press the 'M' button for two to three seconds to continuosly on the monitor. You can release the monitor pressing by the 'M' button again.

Reset the options using the Up/Down buttons.

(6) Function

You can use this button for selecting or releasing functions. (8 functions are available) Reset the options using the Up/Down buttons. Press the PTT button to finish after resetting the options. Press the "F" button to switch to the next function. If no buttons are pressed in 10 seconds, the selected function mode will be cancelled.

Pres the PTT button to finish after resetting the options.

1) Low/High Functions of Squelch

Press the 'F' button once to select- select LOW

Press the "F" button once to select Squelch system, the icon "59" will begin flashing. This is a sensitivity adjustment function for users to communicate at the most comfortable situation. Select Low/High using the Up/Down buttons, it'll be then stored automatically at the same time. If no buttons are pressed in 5 seconds after selecting functions, the monitor will switch back to the main display. Press the PTT button to finish the function mode.

Press the 'F' button once to select- select HIGH

2) SETTING BEEP SOUND

Press the 'F' button twice to select the beep sound.

This function helps you confirm that you press the buttons properly with the beep sound. Press the "F" button twice to select the beep sound, the icon " ♫ " will begin flashing. Select On/Off using the Up/Down buttons, it'll be then stored automatically at the same time. If no buttons are pressed in 5 seconds after selecting functions, the display will switch back to the main display. Press the PTT button to finish the function mode.

3) KEY LOCK

Press the 'F' button three times to set up 'Key Lock'.

Press the "F" button three times to set up 'Key Lock', the icon " 🔒 " will begin flashing. Select On/Off using the Up/Down buttons, it'll be then stored automatically at the same time. If no buttons are pressed in 5 seconds after selecting functions, the display will switch back to the main display. Press the PTT button to finish the function mode. This function locks the channel you are currently using and other channels can't be chosen. Press the "F" button for two seconds to release the Key Lock funtion.

4) DTMF

Press the 'F' button 4 times.

Set up the DTMF Transmission using the "F" button 4 times, the icon " dF " will begin flashing. Select On/Off with the Up/Down buttons, it'll be then stored automatically at the same time. If no buttons are pressed in 5 seconds after selecting functions, the display will switch back to the main display. Press the PTT button to finish the function mode. If DTMF is on, you can hear the unique sound of DTMF whenever you press the PTT button. This function notifies you of receiving messages. You just can communicate with others after receiving transmission, not at the same time.

5) 2TONE ANI

Press the 'F' button 5 times.

Select the 2TONE ANI function pressing the "F" button 5 times, the icon " 2t " will begin flashing. Select On/Off with the Up/Down buttons, it'll be then stored automatically at the same time. If no buttons are pressed in 5 seconds after selecting functions, the display will switch back to the main display. Press the PTT button to finish the function mode.

This function activates only with the external PC program, and transmits 2TONE that is already saved in whenever you press the PTT button. You can receive only when 2TONE is sensed. You can communicate each other only using the radio which 2TONE is saved in without other radio's interference. If you want to have a general communication with other radio regardless of 2TONE, switchover this function to off.

> ⚠ You should turn off the 2TONE ANI during the general communication. Otherwise, receiving transmission can be unavailable.

6) CHANNEL SCAN

Select the Channel Scan pressing the 'F' button 6 times.

Select the Channel Scan pressing the "F" button 6 times, the icon " SCAN " will be indicated on the display. This function helps you find channels automatically which other radio uses. The unit will now begin scanning through the channels, and channel numbers will scroll on the display rapidly from low number to high number. (See the additional instruction of Channel Scan)

7) VOX MODE

Select the VOX mode pressing the 'F' button 7 times.

Select the VOX Mode by pressing the "F" button 7 times, the icon " VX " will begin flashing. Select On/Off with the Up/Down buttons, it'll be then stored automatically at the same time. If no buttons are pressed in 5 seconds after selecting functions, the display will switch back to the main display. Press the PTT button to finish the function mode.

This function is automatic voice operated transmit system like Hands Free. You don't need to press the PTT button, but you should use an exclusive EAR/MIC of the separate external VOX. (The MIC is not functional in VOX Mode.) If you want to have a general communication using the PTT button, switchover the function to be off or turn the radio off & on again.

8) Setting VOX Levels

Select the VOX mode pressing the 'F' button 8 times.

Select the VOX Mode by pressing the "F" button 8 times, the icon " LE " will begin flashing and be indicated on the LCD. Sensitivity is how loud you have to talk to activate the VOX circuit. The VOX has 9 levels of sensitivity that can be selected using the Up/Down buttons. Option will require more voice level to activate, it'll be useful in very noisy areas. Select the VOX level desired, and press the PTT button to save it.

Additional Instruction of Scan Channel

(1) Order of Scan Channel

The scanning will progress as follows if Priority Scan Channel is assigned : General Scan Channel - General Scan Channel - Priority Scan Channel.

This allows you to scan only two channels. If Priority Scan Channels are assigned, you can scan as following : General Scan Channel - General Scan Channel - Priority Scan Channel 1,General Scan Channel - General Scan Channel - Priority Scan Channel 2. But in the current radios, Priority Scan Channel 1 and 2 are not assigned.

Example

There are two kinds of channel scanning : priority scan channel and general scan channel. General scan channel is what you'll select among the telephone channels which are scanned already in the radio. Priority scan channel is a channel that you'll scan frequently among the general scan channels.

You can choose at most two channels for Priority scan channel, we call the first channel "priority scan channel 1" and the second channel "priority scan channel 2".

If you can specify 10 levels of the general scan channels, assign priority scan channel 1 to channel 5, priority scan channel 2 to channel 6. Assigned scan channel will progress as follows. (See the registration and cancellation of the scan channel in a special mode)

general scan channel

① ② 5 ③ ④ 6 ⑤ ⑥ 5 ⑦ ⑧ 6 ⑨ ⑩

priority scan channel 1   priority scan channel 2   priority scan channel 1   priority scan channel 2
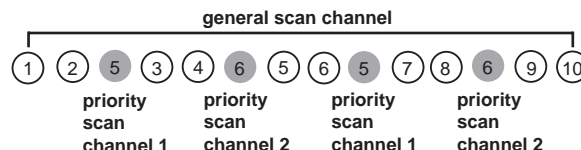
(2) Receive and Transmit During Scanning Channel

If there is a signal reception and transmission during scanning channel, scanning will be stopped at the channel. At this time, you can transmit according to the transmit way by pressing the PTT.

(3) How to Transmit During Scanning

You can transmit by pressing the PTT button while you are scanning.

1. The channel just prior to progress scanning (HOME Channel)
2. The current channel on scanning (Optional scan channel)
3. Received final channel

You can specify the external PC program with these 3 transmit ways, current radios are specified with a final received channel.

(4) Progress the Channel Scan

When the radio catches any signals, scanning will be stopped on that channel for about 2 seconds, and resume scanning from the next channel. It is possible to set up with the external PC program. If the scanning stops on the channel that you detect and if you want to keep scanning after communication, press the "Up" button to resume scanning to the next channel.

(5) Temporary Deletion Channel on Scanning

You can delete a scanned channel temporarily if there are many channels you want to scan. Press the "Down" button, the channel will be then deleted temporarily. When you finish scanning and start it again, the channel you deleted will be restored to the mode just before deleting channels.

> **! * How to Register the Scan Channel**
> You can register the channel which you want to scan among the channels in the radio as using the external PC program or through the registration mode of the scan channel in the radio. (See the registration and cancellation of the scan channel in a special mode.)

2. How to Use 5TONE Calling Mode

1) 5TONE CALLING MODE

Pressing the 'F' button for over 2 seconds.

personal ID

5TONE ID

You can change the 5TONE Calling Mode by pressing the "F" button for over 2 seconds, and switch to the general calling channel by pressing it one more time. You can use the 5TONE Calling Mode only when you input your personal ID and 5TONE ID. You can communicate with other specified radios or with the members of same group without any external interference, and also can call someone's radio that you know his/her 5TONE ID.

5TONE Memory will be indicated on the display if you press the "F" button for 2 seconds on the calling channel. We name it "CallingMode". First flashing 2 numbers are the memory number, fixed 5 numbers are 5TONE ID. You can find the ID pressing the Up/Down buttons. Recordable memory number of the external PC program is 50. Press the "F" button for over 2 seconds to return to the general calling channel.

2) TRANSMIT CALLING

The radio will transmit the ID, which is already indicated on the LCD, and your ID one by one if you press the "F" button once in 2 seconds after you find out the personal/group ID. On the transmit channel that is switched to the calling mode already, you can hear the unique sound of 5TONE through the speaker. If you don't know your 5TONE ID, you can find it out when you turn on the power by pressing the "F" button. (See the Special ID of Special Mode)
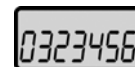
Example

A — TRANSMIT CALLING → **B**
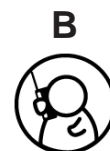
5TONE ID : 12345   **5TONE ID : 23456**

A can switch the mode to 5TONE Calling Mode pressing the "F" button for over 2 seconds. At first, find out B's ID '23456', which is registered to the memory 03 among 5TONE ID that is registered through the external PC program.

`0323456`

A calls B by pressing the "F" button. You can hear the unique sound of 5TONE, the icon "TX" will be indicated on the LCD for a second.
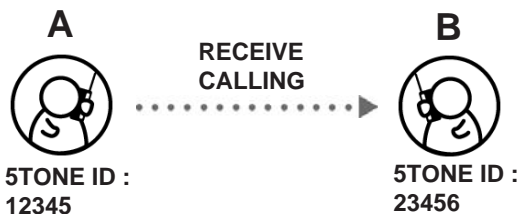
3) RECEIVE CALLING

**The radio will be switched to the calling mode.**

If your ID is called on the current channel, the radio will be switched to the calling mode and the icon "🔔" will be indicated on the LCD. You will hear an audible tone for 2 seconds. The radio's ID that you are transmitting will be on the LCD, and the first two numbers of memory will be also flashing if the ID is already assigned in the 5TONE memories.
If no buttons are pressed in 10 seconds after being called on the general calling channel, the calling mode will be released and the radio will switch back to the general calling channel automatically.

Example

A   **B**

RECEIVE
CALLING

5TONE ID :
12345

5TONE ID :
23456

When A is calling B, the icon " 🔔 " will be indicated on B's LCD. You will hear an audible tone. A's 5TONE ID will appear on B's LCD.
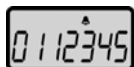
`0112345`

If B cannot receive the call and there's no buttons pressed in 10 seconds, the calling mode will be released and the channel will switch back to the calling channel.

4) TRANSMIT ON THE CALLING MODE

If B cannot receive the call and there's no buttons pressed in 10 seconds, the calling mode will be released and the channel will switch back to the calling channel.
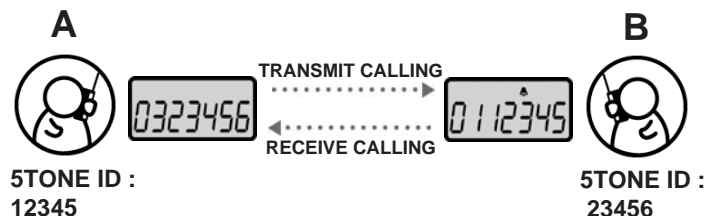
5) RECEIVE ON THE CALLING MODE

You can communicate only when your ID is received on the calling mode. You cannot call anyone without receiving 5TONE ID. It's possible only under the detected IDs. Therefore, please switch to the general calling channel after finishing the calling mode if you want a general calling regardless of IDs,
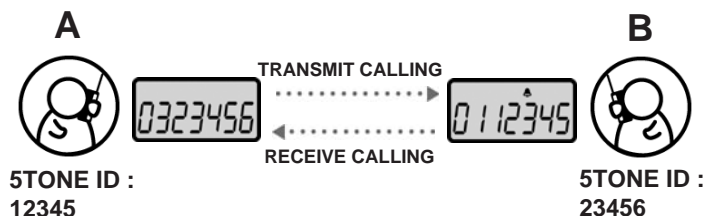
Example

● **You can get through**

-Talk after Call
A is transmitting a call and B is receiving a call, the radios are on the calling mode. At this time, these two people can talk each other pressing the PTT button.

A   **B**

TRANSMIT CALLING

`0323456`   `0112345`

RECEIVE CALLING

5TONE ID :
12345

5TONE ID :
23456

**-Talk after corresponding with each other's 5TONE ID**
A and B can communicate to each other by pressing the PTT button when each other's ID are on the LCD (B's ID on A's LCD, A's ID on B's LCD) on the calling mode.

A   **B**

TRANSMIT CALLING

`0323456`   `0112345`

RECEIVE CALLING

5TONE ID :
12345

5TONE ID :
23456

Example

● **You cannot get through**

Both A and B are on the calling mode. If B's ID is indicated on A's LCD and C's ID is indicated on B's LCD, B can receive A's call, yet can transmit C's radio only. Neither A nor B can receive a call on the calling mode even though they press the PTT button on the general channel.

A   **B**   **C**

X

5TONE ID :
12345

5TONE ID :
23456

5TONE ID :
12346

`0323456`   `0112346`
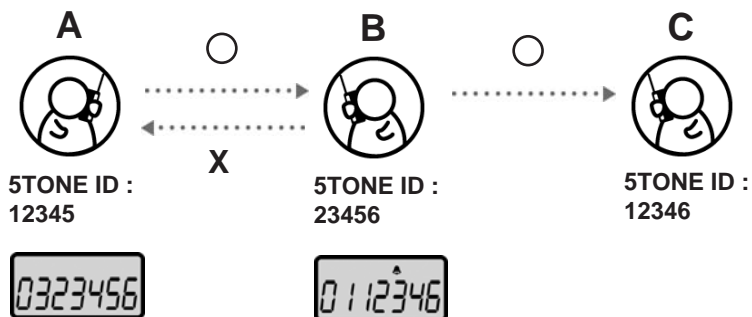
Additional Instruction of Scan Channel

(1) The Feasible Calling Condition of the Radio

General Call	**2TONE Call**	**5TONE Call**
Audible Channel Frequency **+** Serve Tone	Audible Channel Frequency **+** Serve Tone **+** 2Tone	Audible Channel Frequency **+** Serve Tone **+** 5Tone

It's only possible to match the above conditions in order to communicate with other radios. General calling and 2TONE calling are available in the above conditions, but 5TONE calling is possible only when both radios are set to the calling mode. You can call a group at the same time if you input some 5TONE IDs in the same group. You can communicate with others only when you know their 5TONE IDs. In this case, you have to switch 5TONE mode to the general calling mode, or have to call the other on the general calling mode.

3. How To Use the Special Mode

This unique function of LMR explains proper functions when the radio is in use

1) PROGRAM MODE

Turn on the Power pressing the 'M' button.

- Use this mode when you input or set the audible frequencies using the external PC program.
- Turn on the Power by pressing the "M" button.Software version will appear on the LCD.

2) CLON MODE (COPY)

the original radio   the clone radio

Turn on the Power pressing PTT button.

- This function is to copy data of radios. You should use the exclusive CLON JACK to connect the original radio and the clone radio.
- For the original radio, turn on the Power by pressing PTT button.
- The sign "CLON" will appear on the original radio's LCD.

Turn on the Power pressing the 'M' button.
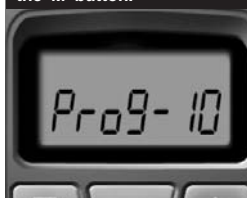
- Set up the clone radio to the program mode.
- For setting up the program mode, please turn on the Power by pressing the "M" button.(See Program mode)

Press the original radio's 'F' button.

- If you finish the above orders, you can start copying with the original radio's "F" button.
- Progressing the copy, the icon "----" will be indicated on the clone radio's LCD.

- Finishing copy, the sign "SUCCESS" will be indicated.

- If errors occur, the sign "ERROR" will be indicated on the clone radio's LCD. Then, copy again after verifying the connection.

3) REGISTER/CANCEL THE SCAN CHANNEL LIST

Turn on the Power pressing the Up button.

The scan channel list   Channel

SCL-001

- Turn on the Power by pressing the Up button. If channels are already registered in scanned channels' list, the icon "**SC**" will be indicated on the LCD like the picture, if not, it'll not be indicated.

- Switch channels by pressing the Up/Down button.
- Choose "Register Scan Channel" (icon "**SC**" will appear) or "Cancel" (no "**SC**").
- If you want to choose the priority channel, press the "M" button on the current page. It'll switch to the option "priority channel 1".

Press the Up/Down button.

The scan channel list   Channel

P1-001
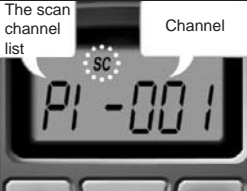
- Choose a "priority channel 1 by pressing the Up/Down buttons.
- Choose the "Assign Priority Channel 1" (icon "**SC**" will appear) or "Cancel" (no "**SC**").
- Move to the "priority channel 2 by pressing the "M" button.

Press the Up/Down button.

The scan channel list   Channel

P2-001

- Choose a "priority channel 2" by pressing the Up/Down buttons.
- Choose the "Assign Priority Channel 2" (icon "**SC**" will appear) or "Cancel" (no "**SC**").
- Move to the "priority channel 2" by pressing the "M" button once.
- Turn off the Power and Turn it on again after finishing the registration of scanning

4) PASSWORD MODE

Turn on the Power pressing the 'Down' button.

M-PASS

- Turn on the Power by pressing the "Down" button.
- You can set/change/delete your password of the radio.
- The password number can be of maximum 7digits. If you assign your password under 6 digits, save it by pressing the PTT button.

INPUT BUTTON	PASSWORD	INPUT BUTTON	PASSWORD
DOWN BUTTON	1	UP BUTTON	3
FUNCTION BUTTON	2	MONITOR BUTTON	4

- Setting Password : the icon "M-PASS" that can be seen on display means there is no active password on the radio. Input the pass-word twice (over than 4 digits)
- It'll be finished when you press the PTT button or input 7 digits. If you save a new password, you have to input the assigned password whenever you turn on the radio.

⚠ You cannot use the radio if you input the wrong password more than 5 times. Special attention must be paid to your password. Please call the A/S center when you forgot your password.

- Change Password : First, press 'Down' button and power 'on' to switch to the password mode, and input a new password.
You can then change your password if you execute according to the process of "setting password".

- Delete Password : this function is to cancel the established password when you want to use the radio without any setting password. Input the established password when the icon " *PASS* " is indicated on the LCD.
- The icon " *n-PASS* " (new password is required to input) will appear on the LCD. Don't input any new password, just press the PTT button.
- The icon " *r-PASS* " (reconfirm password) will appear on the LCD. Then press the PTT button again.

- The icon " *dEL* " (delete a password) will appear on the LCD.

5) CONFIRM SELCALL ID

Turn on the Power by pressing the 'F' button.

- Turn on the power pressing the "F" button.
- You can confirm the 2TONE/5TONE ID of the radio using the external PC program.
- 2TONE/5TONE ID will be indicate on the LCD one by one whenever you press the "F" button.

Turn on the Power by pressing the 'F' button.

4. Choose the Inner Function

It's impossible to change these functions with any operation because it's set only by using the external PC program. If you have any questions, please call the store where you bought it, agents or the main office.

1) RESTRICTIVE FUNCTIONS FOR TRANSMISSION.

It prevents a long talk and an excessive waste of batteries. If this function activates, you can't transmit even though you press the PTT button. Here are two operations : TOT (Time Over Time) and BCLO (Busy Channel Lock-Out)

1. TOT : When you transmit for over the regular time, the penal time will be applied. This function helps you retransmit continuously after the penal time. The transmit time can be set from 5 seconds to 200 seconds, and the penal time can be set from 2 seconds to 60 seconds. But in the current radios, 100 seconds of the transmit time and 2 seconds of the penal time are assigned.

2. BCLO : this function blocks a transmission in order not to interfere with other radio's talk when the received signal appears on the channel. Here are the two types,but in the current radios, BCLO function is set to off.
   -Carrier Type : to block transmission when the Carrier audible frequency of the same channel is sensed.
   -Repeater Type : in the channel with the serve-tone, to block transmission when the Carrier audible frequency of the same channel or other serve-tone is sensed.

2) DTMF ID / SELCALL TONE ID

1. DTMF ID : this function is to add and transmit the DTMF ID together when you transmit. It helps the fixed station recognize. You can set up 4 digits of DTMF ID, "1234" will be assigned in general. You can choose the transmit way with the "F" button.

2. 2TONE ID : Input 2TONE ID when you talk each other between the radios using ANI (Automatic Number Identification). You can choose this function with the "F" button. Two digits of "12" will be assigned in general.

3. 5TONE ID : Input 5TONE ID when you use the radio as the call/talk functions with other person/members of group. (See 5TONE Calling Mode)

7. HL - 1000 Function Summary

INPUT	FUNCTION	CONTROL KEY	FUNCTION DESCRIPTION
KEY BUTTON & External PC Program	SQUELCH	1 TIME	Receiving Sensitivity control
	BEEP ON / OFF	2 TIMES	Beep sound when to press key button
	KEY LOCK ON / OFF	3 TIMES	Locking of channel in use
	DTMF ON / OFF	4 TIMES	DTMF transmitting setting
	2TONE ANI ON / OFF	5 TIMES	2TONE ANI setting
	CHANNEL SCAN	6 TIMES	Channel Scanning
	VOX MODE ON / OFF	7 TIMES	VOX mode setting
	VOX SENSITIVITY	8 TIMES	VOX sensitivity setting
	5TONE MODE ON/OFF	FOR 2 SECONDS	Switching to 5TONE CALL Mode
	CLON MODE	PTT + POWER BUTTON	Cloning the program of each units (using Clone jack)
	REGISTER / CANCEL OF SCAN CHANNEL LIST	POWER BUTTON	General/Priority scan channel entry/cancellation
	PASSWORD MODE	POWER BUTTON	Password input / delete
	SELCALL ID CHECKING	POWER BUTTON	Checking of user 2TONE / 5TONE ID
Exernal PC Program	BATTERY WARNING BEEP	ON / OFF	Battery warning Beep setting
	BCLO SELECTION	Enable / Disable	BCLO setting
	BCLO TYPE SELECTION	Carrier / Repeater	BCLO type selecting
	TOT SELECTION	Enable / Disable	TOT setting
	TOT TIME SETTING	TOT Time / Penalty time	TOT time selecting
	BATTERY SAVE SETTING	ON/OFF / ACTIVE TIME	Battery save time setting in waiting mode
	SCAN TIME SETTING	DWELL TIME / TX TYPE	Channel Scan time setting
	SCAN TYPE SETTING	SA Combi / Carrier	Scan type selecting
	DTMF SETTING	ID & TIME INPUT	DTMF ID / Time setting
	VOX SETTING	Delay Time INPUT	VOX delay time setting
	INPUT 2TONE ID / ANI SELECTION	ID INPUT & ANI ON/OFF	2TONE ID input / ANI setting
	2/5TONE TYPE SELECTION	2/5 TONE TYPE SETTING	Selecting 2/5TONE type among 11types including EEA
	2/5TONE OPTION SETTING	2TONE OPTION SETTING	TONE time setting
	INPUT 5TONE ID	ID List INPUT	5TONE ID input

8. BATTERY USE & RECHARGE

BATTERY SAVE FUNCTION

It's impossible to change these functions with any operation because it's set only by using the external PC program. If you have any questions, please call the store where you bought it, agents or the main office.

1) CAUTION IN CHARGING THE BATTERIES

(1) Li-ion Battery used for HL - 1000 series is highly efficient, stable and reliable.
(2) Charge the battery before using it to maintain its proper capacity and for stable radio operation.
(3) Charge the battery to its capacity before using, and recharge it when battery warning beeps.
(4) Battery is designed to be used only with the provided charger. So do not charge it with other charger.
(5) When charging the battery, switch off the radio for fast charging.
(6) Beware that battery terminal does not contact the metal or any conducting material as it could damage the material or hurt yourself.

2) WHEN TO CHARGE

(1) When the radio's performance become unstable due to low voltage of battery.
(2) When Red indicator on the radio is blinking.
(3) When battery indicator is blinking.
(4) When warning sound beeps every 10 seconds while using.

9. USING THE DESKTOP CHARGER

1) Names of each part

5) Adaptor Jack (DC12V, 1000mA)

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2) Rear Slot

1) Front Slot

3) Front charging indicator

HEADLINE

4) Rear charging indicator
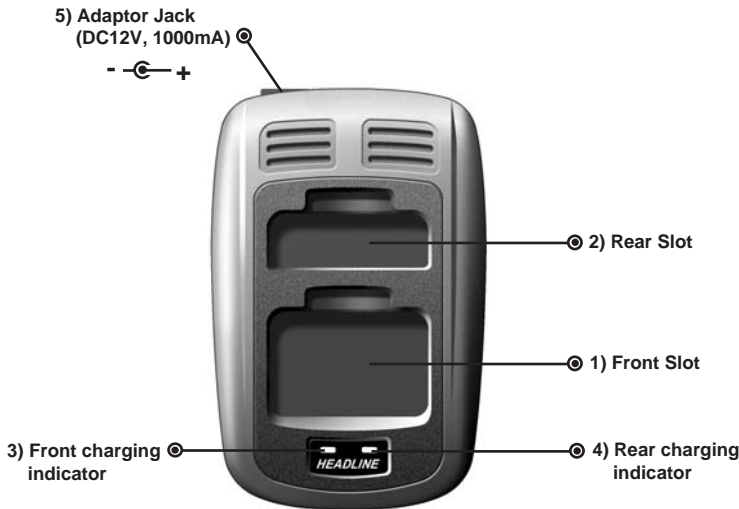
2) Features of the charger

Battery type	Li-ion
Input Voltage	AC 220V[different for regions], 60Hz
Output Voltage	DC 12V, 1000mA
Dimension	140(W) x 57(H) x 90(D)
Operating temp.	0° C ~ +50°C

3) How to Use the charger

(1) Plug the adaptor cable into the adaptor jack of the charger.

(2) Insert the batteries into the front & rear charging slots then front slot will start charging first. (It requires about 3.5 hours for full charging.)

(3) Red indicator shows that the battery is in charging and when it turns to Green, it means batteries are fully charged. Yellow indicator will be on for any error then try to charge it again.

Lamp Color	Lamp Status	Charging status	
Green	on	Charging Completed	Completely charged for use
Red	on	Charging is on going	Need to wait for full charging
Yellow	on	Charging is on going	If front slot is on charge, rear slot will be in stand-by mode.
	Blinking	Charging Error	Re-insert the battery and try again

10. TROUBLESHOOTING FOR ABNORMAL OPERATION

1) PLL UNLOCK

In case of fatal error in the internal circuit, "U" icon will blink on the LCD display with warning beeps. Transmitting and receiving will not work well. Switch off the radio then turn it on again.

2) OTHERS

(1) Check if the operating procedure is right.
(2) Change your location and try again.
(3) Confirm the radio is with correct channel.
(4) Make sure that the antenna is attached correctly.

11. CAUTION / WARNING

1) Do not carry the radio by grasping the antenna only.

2) Keep the radio away from water or oil.

3) Do not disassemble the radio at discretion or do not damage the internal circuit of the radio.

4) If the radio is damaged or not working properly, contact your dealer or service center.

12. CTCSS / CDCSS TONE FREQUENCY TABLE

CTCSS

No.	Freq. (Hz)	No.	Freq. (Hz)	No.	Freq. (Hz)
00	No Tone	13	103.5	26	162.2
01	67.0	14	107.2	27	167.9
02	71.9	15	110.9	28	173.8
03	74.4	16	114.8	29	179.9
04	77.0	17	118.8	30	186.2
05	79.7	18	123.0	31	192.8
06	82.5	19	127.3	32	203.5
07	85.4	20	131.8	33	210.7
08	88.5	21	136.5	34	218.1
09	91.5	22	141.3	35	225.7
10	94.8	23	146.2	36	233.6
11	97.4	24	151.4	37	241.8
12	100.0	25	156.7	38	250.3
				39	69.3

CDCSS

NO.	CDCSS CODE	NO.	CDCSS CODE	NO.	CDCSS CODE
1	023	29	174	57	445
2	025	30	205	58	464
3	026	31	223	59	465
4	031	32	226	60	466
5	032	33	243	61	503
6	043	34	244	62	506
7	047	35	245	63	516
8	051	36	251	64	532
9	054	37	261	65	546
10	065	38	263	66	565
11	071	39	265	67	606
12	072	40	271	68	612
13	073	41	306	69	624
14	074	42	311	70	627
15	114	43	315	71	631
16	115	44	331	72	632
17	116	45	343	73	654
18	125	46	346	74	662
19	131	47	351	75	664
20	132	48	364	76	703
21	134	49	365	77	712
22	143	50	371	78	723
23	152	51	411	79	731
24	155	52	412	80	732
25	156	53	413	81	734
26	162	54	423	82	743
27	165	55	431	83	754
28	172	56	432		

13. WARRANTY

Field Retum and Product Warranty Agreement

Headline I & C (Phils.) Inc. and its VHF/UHF portable radio products guarantee that the LMR product and all other genuine accessories is free from factory workmanship and material defects and is fully functional upon delivery to dealer center and customer procurement as certified by the company Quality Control Division.

1. The limited warranty shall apply on to the two-way-radio units. The warranty shall cover the first twelve (12) months beginning on the date of purchase of the product.

2. The limited warranty extends only to the original consumer who purchased the product from authorized dealer. The warranty is not transferable to any subsequent purchaser or end-user.
   Verification shall be done through the official proof of purchase and/or the sales receipt.
   Initial verification must be done by the dealer prior to its repair or return to Headline factory.

3. This warranty covers only the consumer who buys the product in the Philippines. The same product of the same manufacturer bought outside the country or imported elsewhere shall not be serviceable by this limited warranty.

4. During the warranted period, Headline or it's authorized service centers will repair or replace, at Headline's discretion, any defective product or parts thereof with new or factory rebuilt replacements. The same product in full functional and working condition shall be returned to the consumer.
   Service shall only be done upon verification that the defect is factory workmanship or material deficiency inherent. No charge will be made to the consumer under such circumstance. All replaced parts, boards or accessories shall become property of Headline. The external radio coverings and other cosmetic parts are free of defects at the time of shipment and therefore shall not be warranted.

5. Upon appeal or request for Headline's or its service center's services or repairs, the consumer must present the "proof of purchase" and/or the official sales receipt.
   The authorized dealer shall conduct its initial analysis and investigation of the claim before doing any related repair or services.

6. Service shall not be provided to the consumer if the product are under the following conditions:

   a. The product has been subjected to: abnormal use, nonstandard condition, improper storage, exposed to wet condition, exposed to extreme temperatures beyond product's withstanding point, tampering, illegal modifications, unauthorized repairs including but not limited to use of unauthorized spare parts, misuse, abuse, neglect, improper installation, food or liquid spills, wrong adjustment done by consumer and any acts beyond Headline control. This must be initially checked by the dealer.
   b. Headline was not informed by the consumer of the alleged defect or malfunction within the applicable warranty period.
   c. The products' serial number and name label has been defaced, damaged, removed or altered.
   d. The product has been utilized using other parts or accessories not provided by Headline, not fit for use with the product or used in other than its intended application.

7. If any problem develops during the limited warranty period, the consumer shall do the following.

   a. The consumer shall return the product to the "place of purchase" or the authorized dealer's outlet.
      Providing the sales receipt or proof of purchase and any information regarding its malfunction. Expenses to such shall be shouldered by the consumer.
   b. Only authorized service center repairman shall be allowed to repair the product. In the absence thereof, only and only the authorized agent or its representative shall return the product to Headline factory for repair. Expenses shall be covered by the agent.
   c. Headline I & C (Phils.) Inc shall not in any way charge the Dealer if the field return product complies with the conditions of the Limited Warranty or have been found to be of workmanship of factory inherent defect.