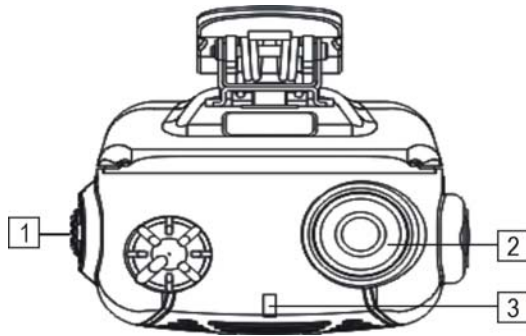


User's Guide

Model No. RL328 LMR Handheld

Part Names & Functions:

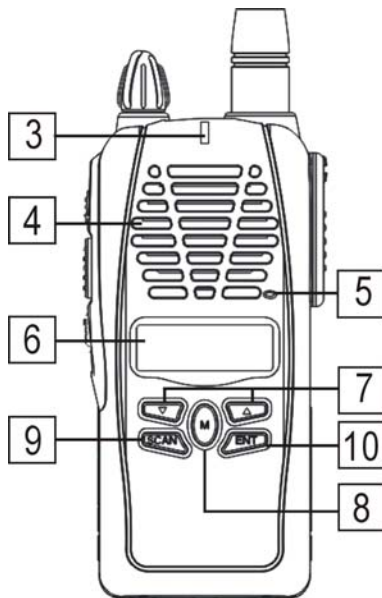
TOP



1 Power/Volume Knob: Rotate it to turn on the transceiver and to adjust the volume.

2. Antenna Connector: Fit the antenna to this MX type connector.

FRONT



3. LED:

4. SPEAKER

5. MIC

6. LCD Display

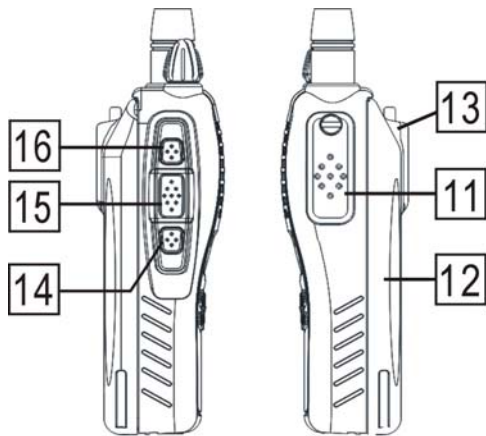
7. UP & DOWN

8. MODE

9. SCAN

10. ENTER

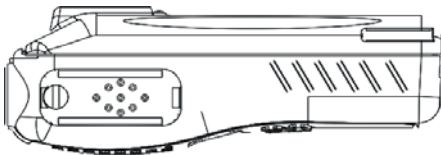
SIDE



- 11. External Speaker/Mic Connector
- 12. Battery Pack:
- 13. Release Buckle
- 14. Priority Button
- 15. PTT (Push To Talk) Button
- 16. MON (Monitor) Button

Fitting & Removing the Battery Pack :

1

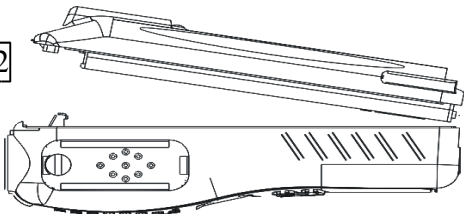


PUSH DOWN

To install the battery pack:

1. Fit the bottom edge of the battery pack into the holes of the transceiver bottom.
2. Push the battery pack down to the transceiver's aluminum chassis till a chip sound is heard.

2

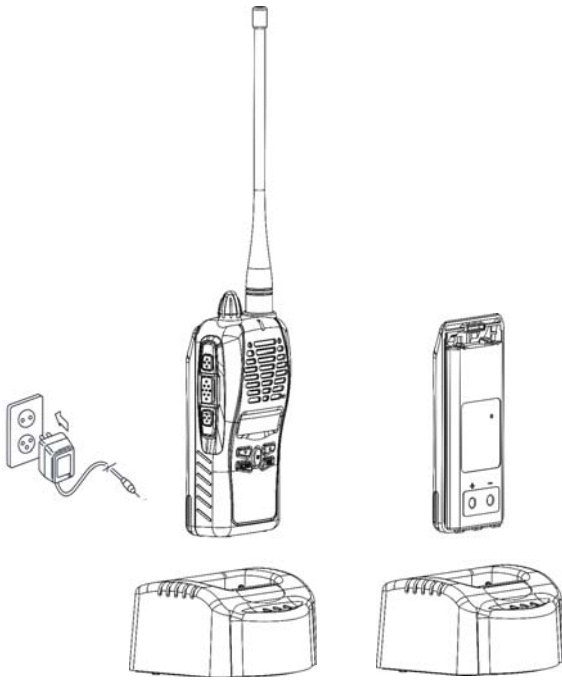


LIFT UP

To remove the battery pack:

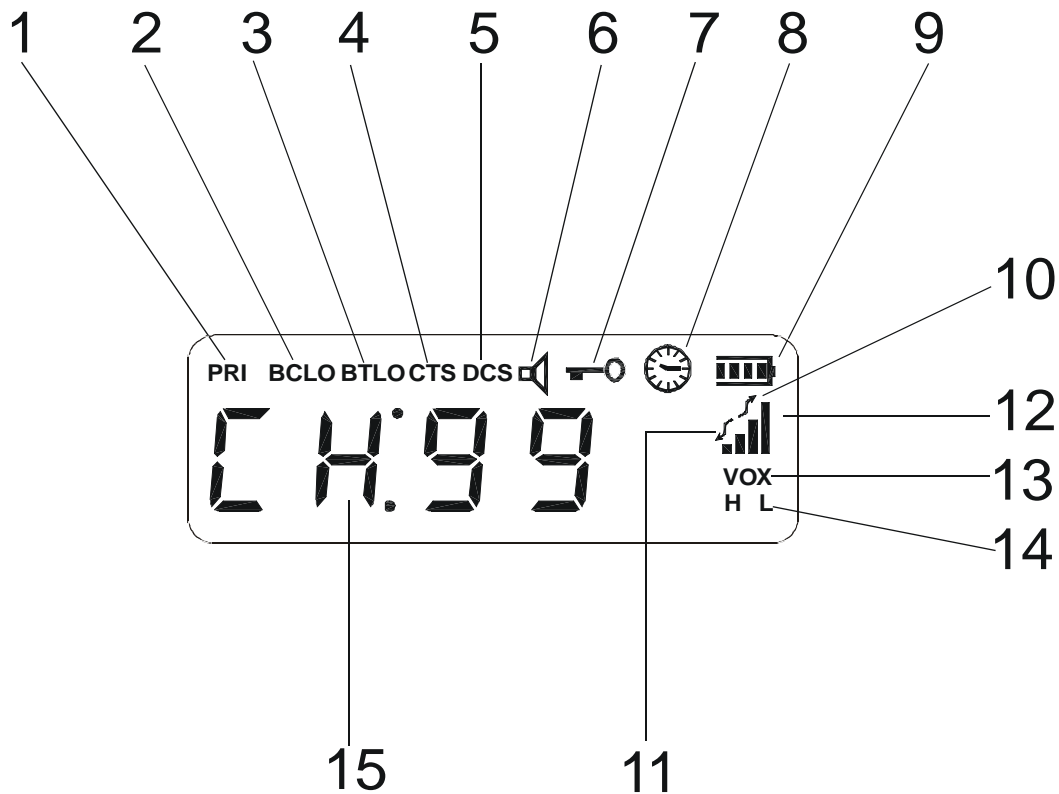
1. Keep pressing the release buckle of the battery pack and lift the battery pack up from the transceiver's body.








Charging the Battery Pack :



- 1.) Connect the jack of AC adaptor into the socket of the charging cradle.
 - 2.) Plug the AC adaptor into the power outlet.
 - 3.) Insert the radio into the cradle
 - 4.) Charge the radio with standard charger for 10-12 hours; with rapid charger for 2 hours.
- **Make sure the radio is turned off while charging it.
- **Do not forget to remove the radio from the charger when the battery is full-charged.

DISPLAY SYMBOLS :



- 1.) **PRI:** indicates the **priority** channel. (Dealer Programmable)
- 2.) **BCLO:** indicates **busy channel lockout** function (Dealer Programmable)
- 3.) **BTLO:** indicates **busy tone lockout** function (Dealer Programmable)
- 4.) **CTS:** indicates **continuous tone coded squelched** system
- 5.) **DCS:** indicates **digital coded squelch**
- 6.)  : indicates button press tone is active.
- 7.)  : indicated when the keypads have been locked.
- 8.)  : indicates time-out timer function is active. (Dealer Programmable)
- 9.)  : shows battery condition. Replace or recharge the battery pack when this icon displays 2 or fewer segments of the battery.
- 10.)  : indicates the radio is transmitting.
- 11.)  : indicates busy channel.
- 12.)  : indicate the strength of TX or RX signal.
- 13.) **VOX** : indicates “VOX” is activated.

14.) **H or L** : indicates TX output power: H means high; L means low.

15.) **Channel Number**: Displays channel number 01-99.

Basic Operation :

Turn the radio On & OFF

- 1.) Rotate the PWR/VOL knob clockwise till the radio is turned on. The radio gets started to auto test for two second. During auto testing, all icons on LCD will appear.
- 2.) After auto testing is done, LCD will show channel number and the functions has been activated by your dealer.
- 3.) Rotate the PWR/VOL knob clockwise to increase its volume or counterclockwise to reduce its volume.
- 4.) To turn the radio off, rotate the PWR/VOL know counterclockwise to the end.click.

Channel Selection

RL-328 is allowed to be programmed with 99 Channels. To select a channel, press the UP/DOWN key to select a channel.

Receiving

RL-328 can be programmed to work channel by channel in “Open traffic” or “Group Mode” (cTCSSs or DCS). Group mode prevents other users on the same channel from being heard on your radio.

*Open Traffic: In this mode, you will hear all communication transmitted on the channel. When a message is received your squelch will un-mute, you will hear the message.

*Group Mode: TCS/DCS (continuous Tone Code Squelch system / Digital Coded Squelch) are particular TX signaling as an access key to work a repeater (encoder) or to unlock the party’s signaling sensitive squelch. In group mode, you will receive only messages coming from parties sending a proper TX signaling. By this way, more radios share the same frequency.

Monitor

Press and release the “MON” button on the side of the radio to pen the squelch. This allows you to over ride the squelch and the “CTCSS” or “DCS” tones. It is useful to monitor the channel before you transmit to ensure there is no one using the channel when you have CTCSS or DCS tones programmed.

Transmitting

Before transmitting, monitor the channel you are using to ensure it is not busy. Keep pressing PTT button and start talking at approximately 2 inches from the MIC hole.

During transmitting, the LED on the top of the radio will glow red. Release PTT button when you have finished talking.

Scan

The advanced scan function of RL-328 allows optionally looking for carrier or carrier with CTCSS or DCS. Your dealer can program the channels to be scanned on the scan list.

***Normal Scan** allows you to scan all the channels you have listed through PC programming. Press SCAN button, you will see the channel numbers cycling continuously. When the radio stops on a “Busy” channel, the SCAN mode will stop and resume after about 5 seconds. If your radio has scanned a channel on which there is a party you want to talk to, you can directly communicate with the party by pressing the PTT button. To stop scanning, press SCAN button again.

***Delete a Nuisance channel** allows you remove temporarily the channels which you don’t want to hear from the scan list. During scanning, when the radio is locked onto a busy channel, press “ENTER” to remove this channel from the scan list. It won’t be scanned until the radio is turned on again.

Mode Setting :

Squelch Level

SQL : 3

Press MODE for one time, LCD shows And then, press UP/DOWN key to increase or decrease squelch level from 0 to 8. 0 means squelch canceling, 8 means tight squelch. Setting the radio to the tight squelch level, you can avoid unwanted signals or noise, but you may not receive a weak signal. So, it will be better for you to select the normal squelch level (default value: 3). Press ENTER to save the setting and get back to operation mode or press MODE to continue setting.

VOX Sensitivity Level

VXL : 3

Press MODE repeatedly (normally twice) till LCD shows Press UP/DOWN key to adjust VOX sensitivity from 0 to 5: 0 means VOX canceling; 1 means the most sensitive (for quiet environment); 5 means the least (for noisy environment). Press ENTER to save the setting and get back to operation mode or press MODE to continue setting.

BEEP while pressing the buttons

bP : ON

Press MODE repeatedly (normally 3 times) till LCD shows Press UP/DOWN key to choose turning ON or OFF the button press beep. Press ENTER to save the setting and get back to operation mode or press MODE to continue setting.

CALL Ringer Selection

Press MODE repeatedly (normally 4 times) till LCD

CALL : 0

shows. Press UP/DOWN key to choose call ringer type from 1 to 9. Press ENTER to save the setting and get back to operation mode or press MODE to continue setting.

TX Power Selection

Press MODE repeatedly (normally 5 times) till LCD shows

PwR : H

Press UP/DOWN key to choose TX output power: H means high power; L means low power. Press ENTER to save the setting and get back to operation mode or press MODE to continue setting.

Keypad Lock

KL : OFF

Press MODE repeatedly (normally 6 times) till LCD shows Press UP/DOWN key to choose keypad lock: “OFF” means unlock; “On” means lock. When keypad is locking, there is a key icon shown on LCD and only PTT, MON, & PRI buttons work. Press ENTER to save the setting and get back to operation mode or press MODE to continue setting.

Advanced Operations :

Handsfree transmit (VOX)

VOX (Voice Operated Transmit) allows you to automatically switch the transmission in hands free mode just by speaking to the built-in microphone, no need to press PTT button.

- 1.)To activate VOX : Turn off the radio. Keep Pressing PTT button and turn the radio on. “VOX” icon will be displayed. During VOX mode, PTT button is disabled.
- 2.)To select VOX sensitivity according to the environment : We suggest that you should set VOX for minimum sensitivity. Sensitivity set too high could cause accidental transmissions, especially in high noise environments.
- 3.)To deactivate VOX : Turn the radio off and turn it on again.

Setting “Group Mode” (CTCSS/DCS) codes

CTCSS/DCS prevents you from hearing any conversation that is not using the same (TCS or DCS) code. This does not make your conversation private.

- 1.)Select the channel which has been programmed with TCS or DCS code, and then, turn the radio off.

- 2.) Keep pressing MON & ENTER buttons and turn on the radio, there will be “TCS” or “DCS” icon flashing.
- 3.) Press Mode button to choose TX or RX respectively. And then, press up/down key to choose the code number you want. (see the table below) Press ENTER to confirm your selection.
- 4.) Turn off the radio to quit code setting.

Disable “Group Mode” (CTCSS/DCS) codes

- 1.) Select the channel you want to disable its tone code (TCS or DCS). And then, turn off the radio.
- 2.) Keep pressing MON button and turn on the radio. On the top of LCD will show TCS or DCS flashing.
- 3.) Press UP/DOWN key to choose “OFF” to disable the tone code. And then, press ENT button to confirm your choice.
- 4.) When you turn on the radio again, you will see TCS or DCS keep flashing on the top of LCD. It means its tone code has been disabled.

If you want to enable the tone code, keep pressing MON button and turn on the radio. And then, press UP/DOWN key to choose “On” to enable the tone code. Press ENT button to confirm your choice.

CTCSS code

code	Freq.	code	Freq.	code	Freq.	code	Freq.	code	Freq.
01	67.0	11	97.4	21	135.5	31	192.8	41	165.5
02	71.9	12	100.0	22	141.3	32	203.5	42	171.3
03	74.4	13	103.5	23	146.2	33	210.7	43	177.3
04	77.0	14	107.2	24	151.4	34	218.1	44	183.5
05	79.7	15	110.9	25	156.7	35	225.7	45	189.9
06	82.5	16	114.8	26	162.2	36	233.6	46	196.6
07	85.4	17	118.8	27	167.9	37	241.8	47	199.5

08	88.5	18	123.0	28	173.8	38	250.3	48	206.5
09	91.5	19	127.3	29	179.9	39	69.3	49	229.1
10	94.8	20	131.8	30	186.2	40	159.8	50	254.1

DCS Table→

023	025	026	031	032	036	043	047	051	053
054	065	071	072	073	074	114	115	116	122
125	131	132	134	143	145	152	155	156	162
165	172	174	205	212	223	225	226	243	244
245	246	251	252	255	261	263	265	266	271
274	306	311	315	325	331	332	343	346	351
356	364	365	371	411	412	413	423	431	432
445	446	452	454	455	462	464	465	466	503
506	516	523	526	532	546	565	606	612	624
627	631	632	654	662	664	703	712	723	731
732	734	743	754						

Priority Scan

Priority scan allows you to select a channel that will be monitored more often than the others while scanning. Your dealer can program a priority channel through PC. Or you can choose a channel and set it as the priority channel.

SET THE PRIORITY CHANNEL:

- 1.) Keep pressing PRI button and turn on the radio.
- 2.) Choose the priority channel you want to set. And then, press ENT button to confirm.
- 3.) Turn the radio on again.

PRIORITY SCAN:

Set the radio to the priority channel and press SCAN button. You will see the radio scanning like the following mentioned.

Normal Scan	CH1>CH2>CH3...>CH99>CH1
Priority Scan	CH1>CH2>CH1>CH3>CH1>CH4>CH1>CH5....

Dual Watch


Dual watch is a function that allows you to scan the priority channel and one active channel.

- 1.) Choose the active channel.
- 2.) Keep pressing PRI button for 2 seconds, the radio will begin scanning between the active channel and the priority channel.
- 3.) Press PRI button again to stop dual watch scanning.

TOT (Time-Out Timer)


TOT is the function that prevents from locking up a repeater or frequency by prolonged keying of PTT. The time-out timer limits the amount of time you have to transmit your message. When you reach the time limit which has been programmed by your dealer, your transmission will be cut off. In order to transmit again, you must push PTT button to reset the timer.

Disable TOT

- 1.) Keep pressing UP key and turn on the radio. There will be 

flashing on the top of LCD.

- 2.) Press UP/DOWN key to choose "OFF" to disable TOT function. And then, press ENT button to confirm your choice.

- 3.) When you turn on the radio again, you will see a  **keep**

flashing on the top of LCD. It means Time-Out Timer has been disabled.

BCLO (Busy Channel LockOut); BTLO (Busy Tone Lockout)

BCLO is a Dealer programmable feature that disables the radio's transmitter, when the RX signal is being received. Furthermore, BTLO won't disable the radio's transmitter until RX signal with the same tone (CTCSS or DCS) is received.

Disable BCLO or BTLO

- 1.) Switch to the channel which has been programmed with BCLO or BTLO function, and then, turn off the radio.
- 2.) Keep pressing MODE button and turn on the radio. There will be a BCL or BTL icon flashing on the top of LCD.
- 3.) Press UP/DOWN key to choose "OFF" to disable BCLO or BTLO function. And then, press ENT button to confirm your choice.
- 4.) When you turn on the radio again, you will see BCL or BTL icon keep flashing on the top of LCD. It means BCLO or BTLO function has been disabled.

CLONE

Clone is a function that allows you to copy the original setting of one radio to the others.

- 1.) Keep pressing UP & DOWN keys and turn on the radio to be copied (TX).

CLOnE LCD will appears

- 2.) Repeat procedure 1 for the other radio to copy (RX).

3.) Press ENT key of TX radio. If clone is OK, the LCDs of both radios will
End show

4.) If clone is not successful, the LCD of both radios will show **EO1**
Please repeat procedure 3 again.