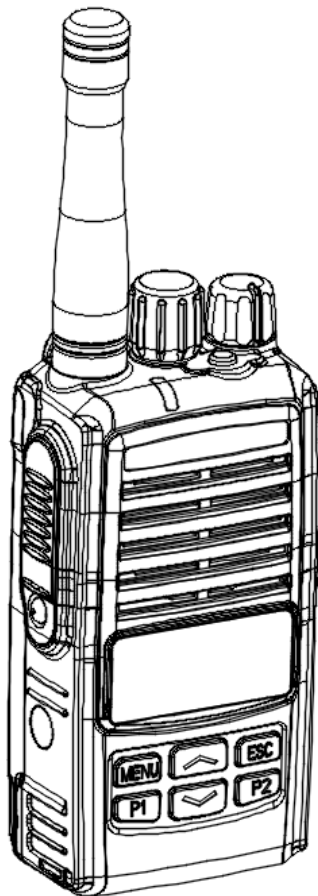


## UDR series QUICK GUIDE



### **CAUTION**

- Before operating the unit, please read this manual thorough and retain it for future reference.
- You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.
- Features can be subject to change or modify without any prior notice for its improvement of performance.

## FEATURES

UDR series radio is very rugged, light weight and it provides powerful sound, extended communication range and quality sound. UDR series radio also provides convenient use and reliable performance in all kinds of industrial fields and public safety sections.

The UDR series radio can be programmed by using a personal computer and program cable which is connected to a speaker microphone jack on the side of the radio.

- 1024 channels are selectable.
- Group/ Individual/ All call
- Dot matrix display
- Emergency alert
- Scrambler
- Power saving
- Earpiece auto-sensing
- Scan (normal & priority)
- Wireless cloning
- Programmable key buttons
- VOX
- Stun/Unstun
- Key lock
- Back light
- SMS
- Low battery alert
- Busy channel lockout
- Time out timer
- Password
- LED indicator
- Radio reset
- TX interrupt
- Encryption (AES)
- IP67 Waterproof

### **Model Number Description**

UDR – 400 Frequency band: 400 ~ 470 MHz

## **BASIC OPERATION**

### **On/Off Volume Switch**

Turn the knob of Volume Switch clockwise to turn on the Radio. By turning the Switch counterclockwise, the Radio is turned off. The audio volume level can be adjusted by turning the Volume Switch.

### **Channel Select Switch**

Turn the knob of Channel Select Switch clockwise to increase the channel number. If you are turning the switch counterclockwise, then you can decrease the channel number. The channel numbers can be preprogrammed by using PC program. The channel selections also can be changed by up and down buttons on the front side of the radio.

### **PTT Button**

The radio is converted to transmission mode and transmits the RF signal by pressing and

holding the PTT button on the left side of the radio. The status indication LED lights in red color. And the radio is converted to standby mode by releasing the PTT button. It is recommended to talk about 5~7cm away from the microphone for better sound quality and better voice communication.

### Monitor Button

The receiving status of the selected channel can be checked by using the “Monitor” button.

- Normal Mode: While you are pressing and holding the “Monitor” button for about 2 seconds, it is possible to check the receiving status of the channel.
- Continuous Mode: Press and hold the “Monitor” button for more than 2 seconds, a beep tone is heard along with a noise and the monitor function is maintained. When you press the Monitor button again, the monitor function will be released.

### Emergency Button

Press the “Emergency” button at an emergency situation, an emergency siren will be heard through the speaker in the Radio. And the Radio will also transmit an emergency signal to the other party through the emergency channel.

### Speaker Microphone Jack

The speaker microphone jack on the right side of the radio will be used for interfacing with external speaker microphones or similar accessories. It will also be used for doing PC programming, Wired Cloning and Tuning.

## Indicators

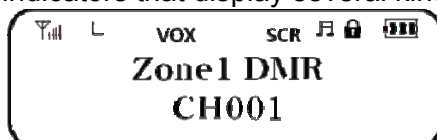
### Status Indication LED

Users can recognize the current status of UDR series radio by the color of LED. The status indication will be as follows.

- \_ When the transmitting status is normal, Red color LED will be ON.
- \_ When the receiving status is normal, Green color LED will be ON.
- \_ When the CTCSS tone or DCS code is not being received due to mismatch, Green color LED will blink.
- \_ When the battery is low, Red color LED will blink and an alert tone will go off.
- \_ When the radio is in Cloning mode, Orange color LED will blink.

### Dot matrix LCD

Dot matrix LCD will show several kinds of status of the radio. Zone/Channel number, Frequency/Sub-tone, or Pre-programmed Name of each Channel will be displayed on the LCD. And it also provides the Menu Operation. In addition, there are 9 status ICON indicators that display several kinds of status of the radio.



①

Signal strength indicator is ON when the radio receives RF signal. It can be divided by 4 kinds of signal levels. In case of strong signal, all 4 signal strength indicator bar will be ON.

②

Transmitting power indicator “L” or “H” is ON when Low/High power mode is selected.

③

2Tone, 5Tone mode indicator is ON when the channel is programmed for 2Tone, 5Tone operation.

④

VOX indicator is ON when the VOX mode is activated.

⑤

Scrambler mode indicator is ON when the scrambler function is activated.

⑥

Compunder mode indicator is ON when the compander function is activated.

⑦

Radio generates a several kinds of alert tones when the alert tone function is activated. This indicator will be OFF when this function is deactivated.

⑧

Lock indicator is ON when the radio is locked.

⑨

Battery capacity indicator. All the segments are ON when the battery is fully charged. Each segment become OFF step by step as the battery capacity goes low while the radio is being use. The battery indicator will blink when the battery power is very low and need to be recharged.

⑩

The Dot matrix LCD can show one line of 14 characters.

The LCD backlighting can be programmed to turn on for a certain time after a button is pressed. It will remain turned on for the programmed length of time after the button is released. And it can also be programmed to remain off all the times.

## **BATTERY PACKS**

The following battery pack is provided for the UDR series radio.

\*Standard Rechargeable Battery Packs (2600mAh Li-ion)

The UDR series radios use high-performance Li-ion battery. The battery is safe, of high-performance and highly reliable. Using the provided standard charger in each package will make the battery to get sufficient efficiency and long lifetime.

(3500mAh Li-ion is Optional.)

### **⚠CAUTION**

It is strongly recommended to use the original Battery Packs provided in each package.

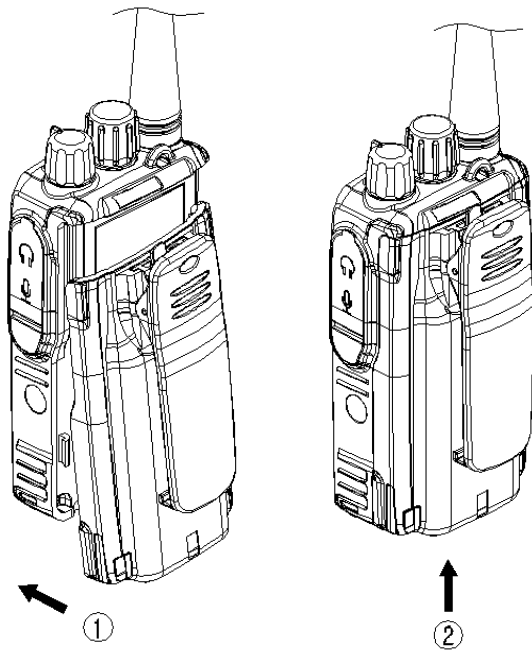
### **Installing the Battery Pack**

\*Ensure the ON/OFF volume switch of the radio is set to OFF position.

\*Hold the radio and battery pack with their back facing you. See Figure.

\*Align the hook back of the radio with the hook front side of the battery pack.

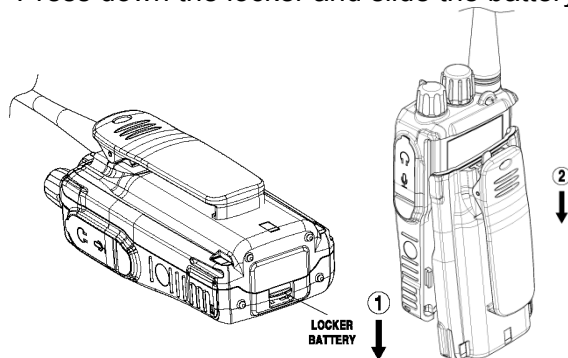
\*Press and slide the battery pack fully upper side of the radio until the battery releases latch click into place.



### Removing the Battery Pack

\*Ensure the ON/OFF volume switch of the radio is set to OFF position.

\*Press down the locker and slide the battery pack down side of the radio. See Figure.



### Charging the Battery Pack

New batteries or batteries that have been stored, but not used for a long time should be fully charged before placing into service. Low battery voltage would shorten the talk range and affect the performance of the radio.

When the battery pack requires charging, the battery indicator in the LCD will blink and the radio will sound a high pitch tone every second.

### How to Charging

- \_ Plug the standard desktop charger into the electricity power outlet for AC 100 ~ 240V.
- \_ The standard desktop charger has two slots for charging.
- \_ To recharge the radio with the battery installed, insert the radio into the front slot of the charger after you turned off the radio.
- \_ To recharge a battery only, insert the battery into the rear slot of the charger.
- \_ Although the Green LED is on after recharging the battery, please continue recharging the battery for another 30 minutes to ensure the complete full charging.

Status	LED
Charging	Red LED is ON
Complete full charging	Green LED is ON
Error	Red LED is blinking
Standby of charging, excess of temperature range	Orange LED is ON



### CAUTION

It is strongly recommended to use the original Chargers provided in each packages. Charging the battery by using any 3rd parties' chargers might cause unexpected damage to the battery and radio.

### CHARGER

The standard desktop charger was designed to charge the high capacity batteries (2600mAh Li-ion)of the UDR series radios.

Input Voltage: AC 85V□250V

Battery: 2600mAh Li-ion

Rapid Charging Time: 3 1/2 hours

Operating Temperature:0~50°C

Charging Current: 900 mA (Rapid Charging)

### RADIO OPERATION

#### Installation and Removal of Antenna

Put the antenna into the antenna connector of the radio and turn the antenna clockwise for installation. In order to remove the antenna from radio, turn the antenna counterclockwise.



### CAUTION`

Over tightening the antenna screw may cause damage to the antenna and connector and finally it may affect the radio's performance accordingly.

#### Power On/Off

Turn the Power switch clockwise and a "beep" will sound and the model name of the radio will be displayed as soon as the power is on. And the radio will enter into the mode where the radio had been used previously. If there is a user ID which was already programmed, then the ID will be displayed on the LCD.



### CAUTION`

If you turn on the radio while you are pressing a button of the radio, the radio may enter into a special mode. In this case, the transmitting and receiving signals will be blocked. We recommend you to follow the above mentioned, but not to do any other key actions whenever you turn on or off the radio.

#### Transmission

You can get into the transmission mode by pressing the PTT button.

DTMF will be transmitted by pressing the PTT button if the radio was already programmed to send the DTMF or 5-tone. While the DTMF or 5-tone is being transmitted, it's not possible to send any voice signal. After the DTMF, a voice signal will be transmitted and the Red LED will light up. For a quality voice communication, it is recommended to talk to the radio with keeping about 5 ~ 10cm distance.



### CAUTION`

In case TOT function was set in a radio, if the radio transmits continuously over a certain time,

the transmission will be forced to be controlled for other radios' users.

### **Receiving**

You can get into the receiving mode by releasing the PTT button. You can adjust the sound level by using the volume switch. In the receiving mode, Green LED will be on and you can check the receiving status with the RSSI indication on the LCD.

If a receiving frequency is same as that of the current channel, but sub-tone is not same as that of the current setting, then Green LED will blink. To check whether the current channel is in use, press the Monitor(M) button on the left side of the radio. If you press and hold the Monitor button for about 2seconds, the Monitor mode is activated with a "beep" sound. Make a short pressing the Monitor button again to release the Monitor mode.

### **Changing Channels**

You can change channels by using the Channel Switch or Up/Down buttons. Turn the Channel switch clockwise or press 'Up' button to increase the channel number with a beep sound. And Turn the Channel switch counter-clockwise or press 'Down' button to decrease the channel number with a beep sound. Press and hold Up/Down button, and then the channel will goup/down continuously.

### **Adjusting Transmitting Power**

You can select either High or Low transmitting power and you can also change the transmitting power in the Menu mode. At the Low-Power mode, the indicator icon "L" is displayed on the LCD. Under good circumstances for radio communication, by setting the transmitting power at Low-power mode, you can extend the battery life time.

The H/L transmitting power can be pre-programmed by its programming software and it also can be changed by users in menu mode or by a short-key pre-programmed.

### **SCAN Mode**

SCAN function can be executed with a "beep" sound in standby mode by pressing as hort-key pre-programmed as a scan button. If you press a short-key for SCAN function, the radio will change to the SCAN mode and check the preprogrammed channels in order. To deactivate the SCAN function, press "MENU" button or turn the radio off. A scan channel list should be set up beforehand by using the programming software. Otherwise, the radio cannot be able to go to SCAN mode.

### **Normal Scan**

Once SCAN function is activated, the radio will perform a normal scanning. When the scan channel list includes NS1, NS2 and NS3, on the normal scan mode, the radio scans channels in the sequence of NS1,NS2, NS3, NS1, NS2, NS3,.....

### **Transmitting during Scanning**

If users press the PTT button during Scanning, the transmitting will be made through a pre-programmed channel. Users can select and establish one transmitting channel out of three in below in advance by using the PC programmer.

- \_ Home channel
- \_ Last activated channel
- \_ Current scan channel

### **VOX**

The VOX function can be set up by PC programmer. Without pressing the PTT button, the voice signal can be transmitted through the microphone. Users can change the set-up at Menu mode.

### **Monitor**

In order to open the squelch compulsorily, press the MON button. If users press the MON button for more than 2 seconds, the squelch is opened and stay there continuously with a “beep” sound. If you want to get out of this mode, make a short pressing the MON button again, or turn off and on the radio again.

### **Sub-tone**

The radio can be programmed for CTCSS encode/decode tone frequencies and DCS code.

### **CTCSS tone frequency**

A list of standard tone frequencies for CTCSS tone is as shown in below.

#### **No. Frequency No. Frequency No. Frequency No. Frequency**

1	67.0	15	110.9	29	179.9	43	196.6
2	71.9	16	114.8	30	186.2	44	199.5
3	74.4	17	118.8	31	192.8	45	206.5
4	77.0	18	123.0	32	203.5	46	229.1
5	79.7	19	127.3	33	210.7	47	254.1
6	82.5	20	131.8	34	218.1	48	165.5
7	85.4	21	136.5	35	225.7	49	171.3
8	88.5	22	141.3	36	233.6	50	177.3
9	91.5	23	146.2	37	241.8	51	60.7
10	94.8	24	151.4	38	250.3	52	62.5
11	97.4	25	156.7	39	69.3	53	64.7
12	100.0	26	162.2	40	159.8		
13	103.5	27	167.9	41	183.5		
14	107.2	28	173.8	42	189.9		

### **DCS code**

A list of standard codes for DCS is as shown in below.

#### **No. DCS Code No. DCS Code No. DCS Code No. DCS Code**

1	023	27	165	53	413	79	731
2	025	28	172	54	423	80	732
3	026	29	174	55	431	81	734
4	031	30	205	56	432	82	743
5	032	31	223	57	445	83	754
6	043	32	226	58	464	84	036
7	047	33	243	59	465	85	053
8	051	34	244	60	466	86	122
9	054	35	245	61	503	87	122
10	065	36	251	62	506	88	212
11	071	37	261	63	516	89	225
12	072	38	263	64	532	90	246
13	073	39	265	65	546	91	252
14	074	40	271	66	565	92	255
15	114	41	306	67	606	93	266
16	115	42	311	68	612	94	274
17	116	43	315	69	624	95	325
18	125	44	331	70	627	96	332
19	131	45	343	71	631	97	356
20	132	46	346	72	632	98	446
21	134	47	351	73	654	99	452
22	143	48	364	74	662	100	454



23 152 49 365 75 664 101 455  
24 155 50 371 76 703 102 462  
25 156 51 411 77 712 103 523  
26 162 52 412 78 723 104 526

## **Call mode**

### **Individual Call**

\_ Enters into the 'Contacts' menu by pressing menu button.  
\_ Select an ID that the user wants to communicate with and press the PTT button to communicate. (ID should be pre-programmed by its PC programmer and a transmitting radio's ID should be listed in a receiving radio)

### **Group Call**

\_ Enters into the 'Contact' menu by pressing menu button.  
\_ Select a Group ID that the user wants to communicate with and press the PTT button to communicate with all radios in the group. (Group ID should be pre-programmed by its PC programmer and a transmitting radio's ID should be listed in all radios in the group.)

### **All Call**

\_ Enters into the 'Contact' menu by pressing menu button.

## **TOT**

TOT function is used to prevent from using one channel continuously for a long time. If a radio transmits longer than the programmed TOT time continuously, the transmitting is automatically stopped and an alert sound is generated. If a Penalty time was set up, then the radio can make transmitting normally only after the penalty time. The TOT and penalty time can be set up by using PC programmer and can change it at menu mode by user.

## **Key Lock**

To set this function ON, press menu button to enter into Settings -> Radio Set -> Keypad Lock' and press menu button again. If you press menu button, this function will be deactivated.

## **PSC**

This function is used to extend the battery lifetime by reducing the power consumption during standby.

This function can be established by using the PC program and users can change it at Menu mode on the radio. (Settings -> Radio Set -> PSC ->Enable/Disable by menu button)

## **Password**

Users can set up a password into each radio. If the Password function was enabled, the radio will request the Password on the LCD screen when users turned on the radio. When users input the correct password, then the radio is activated. This function can be established by using the PC program and users can change it at Menu mode.

## **Language**

Users can select a language to be displayed on the LCD screen between English or Korean. This function can be established by using the PC program and users can change it at Menu mode.

## **SMS**

Users can select one of the 10 short messages pre-programmed into your radio to send.

## Emergency Call

By pressing the red button on top of the radio, the radio will transmit the emergency alert tone. Also the radio will sound the emergency alert tone via current channel. Users can deactivate the function by pressing the red button again. If this function is set to repeat mode, the emergency alert tone will go off repeatedly. To make the repeat mode off, please press the red button. The function cannot become activated during scanning channels. This function can be established by using the PC program and can change it at menu mode by user.

In digital channels, my radio ID will be sent to other radios(UDR-100/400) if my radio ID is pre-programmed into other UDR-100/400 radios. Then the alert tone will go off from the other UDR-100/400 radios while the alert one goes off from my radio.

In analog channels, the alert tone only goes off from my radio.

### CAUTION

Any trial to do Cloning between different manufacturers' radios might cause a critical malfunction to the radios.

### MENU SETUP

Function

F1 \_ Up Arrow Key (Changing Menu)

F2 \_ Down Arrow Key (Changing Menu)

F3 \_ Menu / Enter

F4 \_ ESC

2. How to Setup

19

1) Push the F3(Menu) button for 3sec to go inside of MENU

2) Then Changing Sub-menu with F1 or F2

3. Sub-Menu

1) CHANGING GROUP

2) SET TX Power

3) SET PASSWORD

4) SET ID

5) SET DTMF

6) SET PSC

7) SET TOT

8) SET VOX

9) SET SQUELCH

10) SET EQUALIZER

11) SET Whisper

12) SET SCAN

13) SET EMERGENCY

14) SET INHIBIT TX

15) SET KEY TONE

16) Earpiece Mode

17) SET DISPLAY

18) SET KEY LOCK

19) SET BCL

20) SET ID ALERT

21) LCD Contrast

22) Short Channel

20

23) SET Scramble

24) SET Compander

25) Information: Ver. information

Notice) In the Menu, Only be available to receive RX

1) CHANGING GROUP

F3 (Pushing for 3sec) \_ CHANGING GROUP \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

2) SET TX Power

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET TX Power \_ F3 \_ Tx Power Low \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

3) SET PASSWORD

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET PASSWORD \_ F3 \_ NEW PASSWORD \_ F1 or F2 ( , ) :

Choose the Number (ex : "0000") \_ F3 \_ AGAIN \_ F1 or F2 ( , ) : Choose the Number (ex : "0000")

\_ F3 (Enter)\_ PASSWORD OK (if it fails, PASSWORD FALSE) \_ F4 (ESC)

4) SET ID (This setup function is only operated when ID is granted at the Radio)

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET ID \_ F3 \_ TONE OFF \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F1 or F2 ( , ) for TONE ANI \_ TONE ANI Off \_ F3 \_ "?" &

flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter) \_ F4 (ESC)

5) SET DTMF (This setup function is only operated when DTMF is granted at the Radio)

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET DTMF \_ F3 \_ DTMF ANI OFF \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

6) SET PSC

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET PSC \_ F3 \_ PSC OFF \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

7) SET TOT

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET TOT\_ F3 \_ TOT OFF \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

8) SET VOX

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET VOX\_ F3 \_ VOX OFF \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

9) SET SQUELCH

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET SQUELCH\_ F3 \_ SQ Value 5 \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

10) SET EQUALIZER

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET EQUALIZER \_ F3 \_ EQUAL. Normal 5 \_ F3 \_ flickering \_ F1 or F2 ( , ) then Choose\_ F3 (Enter)\_ F4 (ESC)

11) SET Whisper

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET Whisper\_ F3 \_ Whisper Off \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

12) SET SCAN

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET SCAN\_ F3 \_ Main CH Off \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose. If choose "ON" \_ F3 (Enter)\_ F1 or F2 ( , ) for SCAN CH set\_ F3 \_ F1

or F2 ( , ) for choose Scan CH. \_ F3 for SCAN ON \_ F4 (ESC) \_ F4 (ESC)

13) SET EMERGENCY

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET EMERGENCY\_ F3 \_ EMER OFF \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

14) SET INHIBIT TX

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET INHIBIT TX\_ F3 \_ TX STOP OFF \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

15) SET KEY TONE

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET KEY TONE\_ F3 \_ BEEP ON \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter)\_ F4 (ESC)

22

16) Earpiece Mode

F3 (Pushing for 3sec) \_ F1 ( ) \_ Earpiece Mode \_ F3 \_ EAR\_MIC ON \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter) \_ F4 (ESC)

17) SET DISPLAY

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET DISPLAY \_ F3 \_ DISPLAY ENG. \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter) \_ F4 (ESC)

18) SET KEY LOCK

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET KEY LOCK \_ F3 \_ KEY LOCK OFF \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter) \_ F4 (ESC)

19) SET BCL

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET BCL \_ F3 \_ BCL OFF \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter) \_ F4 (ESC)

20) SET ID ALERT

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET ID ALERT \_ F3 \_ ID ALERT OFF \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter) \_ F4 (ESC)

21) LCD Contrast

F3 (Pushing for 3sec) \_ F1 ( ) \_ LCD Contrast \_ F3 \_ Contrast 30 \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter) \_ F4 (ESC)

22) Short Channel

F3 (Pushing for 3sec) \_ F1 ( ) \_ Short Channel \_ F3 \_ Short Use OFF \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose. If choose "ON" \_ F3 (Enter) \_ F1 or F2 ( , ) for Short CH set \_ F3 \_

F1 or F2 ( , ) for choose Short CH. \_ F3 for Short CH ON \_ F4 (ESC) \_ F4 (ESC)

23) SET Scramble

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET Scramble \_ F3 \_ Scramble ON \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter) \_ F4 (ESC)

24) SET Comander

F3 (Pushing for 3sec) \_ F1 ( ) \_ SET Comander \_ F3 \_ Comander Off \_ F3 \_ "?" & flickering \_ F1 or F2 ( , ) then Choose \_ F3 (Enter) \_ F4 (ESC)

### Warning

1. The radio is produced for the purpose of communication only. You are cautioned that any changes or modifications not expressly approved of both radio and battery in this manual could void your authority to operate this equipment.

2. DO NOT operate it in areas that are sensitive to RF energy such as aircraft, hospitals, blasting sites, and fuel storage sites. Areas with potentially flammable atmospheres are usually, but not always, clearly posted. These may include gas stations, fuel and chemical storage and transfer stations, below deck on boats, and areas where the air contains flammable chemicals or particles such as grain dust or metal powders. Also avoid using this radio while driving. Ear/Mic accessory can help driving safe.

3. To prevent fire or shock hazard, do not expose the unit to rain or moisture. Never expose the radio and battery to temperature above 140 F(60 C), such as incar parked in the sun or under direct sunlight.

4. DO NOT dispose of it in fire because it can explode. Also, do not short the terminals be cause it may become very hot, and damages your skins. DO NOT carry this radio in bags or pockets because it can be short en by conductive materials such as keys and necklace.

### Warranty

1. The warranty period is one year from the purchase date except battery, etc,

- In case a trouble occurs under normal operating conditions, contact the service center or the local sales office of UNIMO Technology Co., Ltd.

Free repair services will be provided within the warranty period.

2. For the following cases, a certain amount of service fee will be charged:

- Performance compromise or troubles occurring after the warranty period
- Troubles of damage due to user's mishandling the device
- Troubles caused by natural disasters
- Troubles caused by user's mistake  
(For example, not following instructions and safety notes in the manual)
- Trouble caused by user's failure to use the recommended power source
- Troubles caused by repairing or remodeling by the user or unqualified person, not the service personnel of UNIMO Technology

***FCC Compliance Notice***

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

***RF Exposure Information***

This equipment complies with FCC radiation exposure limits set forth for an controlled environment .

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. For face-up,25mm was used for test, this equipment should be installed and operated with minimum distance 25mm.

For body worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that Contains no metal .

Non-compliance with the above restrictions may result in violation of RF exposure guidelines.

This radio complies with IEEE and ICNIRP exposure limits for occupational/controlled RF exposure environment at operating duty factors of up to 50% and is authorized by the FCC for occupational use only.

## ISED RSS warning

### Informations sur l'exposition aux radiofréquences

This equipment complies with ISED RF radiation exposure limits set forth for an controlled environment . This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. For face-up, 25mm was used for test, this equipment should be installed and operated with minimum distance 25mm.

For body worn operation, this device has been tested and meets the ISED RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that Contains no metal.

Non-compliance with the above restrictions may result in violation of RF exposure guidelines.

IC exposition aux radiations:

Cet équipement est conforme avec ISED les limites d'exposition aux rayonnements définies pour contrôlé environnement.

Cet émetteur ne doit pas être co-localisés ou fonctionner en conjonction avec une autre antenne ou émetteur.

Pour le fonctionnement du port, l'équipement a été testé et satisfait aux exigences d'exposition aux radiofréquences de l'isedc.

Lignes directrices pour l'utilisation avec les accessoires spécifiés pour ce produit ou avec les accessoires suivants Sans métal.

Le non - respect des limites ci - dessus peut constituer une violation des lignes directrices sur l'exposition aux radiofréquences.

This radio complies with IEEE and ICNIRP exposure limits for occupational/controlled RF exposure environment at operating duty factors of up to 50% and is authorized by the ISED for occupational use only. Cette radio est conforme aux limites d'exposition pour les environnements professionnels / contrôlés d'exposition aux radiofréquences de l'IEEE et de l'ICNIRP avec des facteurs de charge de travail allant jusqu'à 50% et est autorisée par fac à des fins professionnelles seulement.