

HYDX

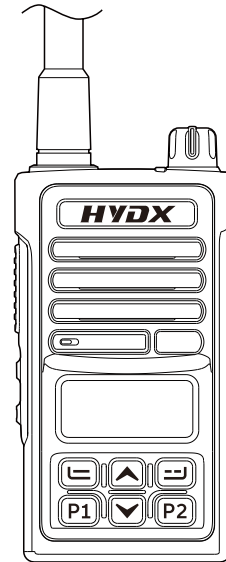
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HYDX

D600/D1000

Digital DMR Two-way Radio

User's Manual



DMR
DIGITAL MOBILE RADIO ASSOCIATION

Brief Introduction

Thank you for buying handheld two-way radio. We believe this simple, stable, beautiful and widely used in all industries and area of professional wireless communications equipment will give you a great surprise. This product is for professional commercial or amateur frequencies, it is necessary to apply for permission to the wireless administrator organization of the provinces and autonomous regions in there local country.

Please read this manual carefully in order to know how to properly operate the radio before use.

Contents

Unpacking and Checking Equipment	01
Preparation.....	02-06
Getting Familiar.....	07-16
Safety.....	17
Overview.....	18-20
Menu Operation.....	21-24
Function Settings.....	25-36
Troubleshooting.....	37
Warranty Card.....	38-39

Unpacking and Checking Equipment

Welcome to use handheld radios, before using we suggest you:

- Please check the packing box of this product and see if there are signs of damage.
- Please open the packing box carefully. We recommend that you identify the items listed in the following packing list. If you find that our product and its accessories in handling are lost or damaged during the shipment. Please immediately contact dealers.

Parts List

Item	Quantity
Radio	1
Rubber Antenna	1
Li-ion Battery Pack	1
Desktop Charger	1
Power Adapter	1
Belt Clip	1
Hand-Strap	1
User's Manual	1

Preparation

■ Using the Battery

The battery is not completely charged at the factory, please charge it before using.

To extend the battery life time, please power off the batteries when you don't use two way radio, and save battery in a cool (temperature less than 25°C) and dry place.

■ Precautions of Charging Equipment

1. Do not expose the charger to rain or snow.
2. Do not operate or disassemble the charger if it has received a sharp blow, or has been dropped or damaged in any way.
3. Never alter the AC cord or plug provided with the unit. If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician. An improper condition can result in a risk of electric shock.
4. To avoid damaging the power cord or socket, pull the plug out of the socket with a hand plug. Do not pull the plug out by pulling the power cord.
5. To reduce the risk of damage to the cord or plug, pull the plug rather than the cord when disconnecting the charger from the AC receptacle.
6. Use of an attachment not recommended or sold may result in a risk of fire, electric shock, or personal injury.
7. Make sure the cord is located so it will not be stepped on, tripped over, or subjected to damage or stress.
8. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and/or electric shock. If an extension cord must be used, please make sure that:

Preparation

Extension line cord use the same pins.

Use 18AWG wires less than 30 meters in length and use 16AWG wires within 45 meters.

9. Do not replace charger's power cord. If the power cord damages, you must stop using charger immediately.

■ Charging the Battery

Please use the battery charger designated to charge battery. After purchase or extended storage (more than two months), the first time to charge battery cannot make battery reach its normal operating capacity. After repeating charge/discharge it two or three times, the operating capacity will increase to its normal capacity.

■ Please Charge the Radio According to Operation Steps as Follows:

1. Insert power adapter into power supply socket.
2. Insert output terminal of power adapter into DC Jack behind the charging kit, now the charging orange indicator lights about 2 seconds then goes out.
3. Insert the battery or radio equipped with battery into the charging kit.
4. Confirm the battery and charger kit terminal contact reliably, when charging indicator light turns into red and charging starts.
5. After completion of charge (charging time is about 4 hours), light turns to be green.

Preparation

■ Indicators Display As Following

Status	Indicator
Power Connected	Orange light is on about 2 seconds then goes out
No battery (Temperature end judges)	All go out
Charge Normally	Red light is on
The battery is fully charged	Green light is on
Fault(over temperature, battery short circuit or over discharge state)	Red light flashes

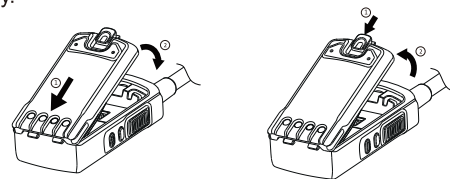
Note: Before charging, please turn off radio power equipped with battery. When charging, using radio will interfere with normal charge of battery and transceiver effect.

Preparation

■ Installing/Removing the Battery

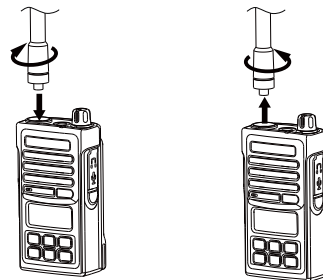
Insert the battery pack into the corresponding slots on the back of radio and push it. Then press the upper end of the battery until you hear a "click".

To remove the battery pack, make sure the radio off, and then unlatch the buckle, the battery from emerge from the radio, and then remove the battery.



■ Installing/Removing the Antenna

Align the threaded of the antenna with the radio's antenna connector. Turn the antenna clockwise to fasten it. To remove the antenna, please turn the antenna counter-clockwise until you can remove it.

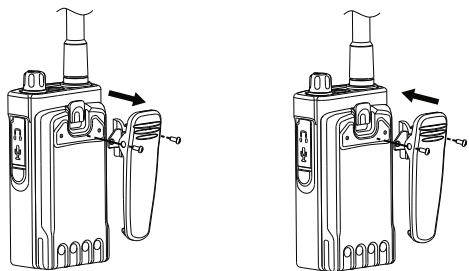


Preparation

■ Installing/Removing the Belt Clip

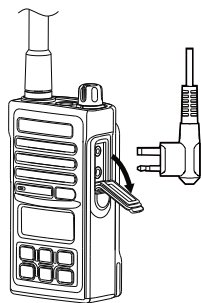
If necessary, the randomly configured belt clip can be inserted into the slot on the back of the battery pack for easy carrying.

To remove the belt clip, simply press the buckle out and push it up.

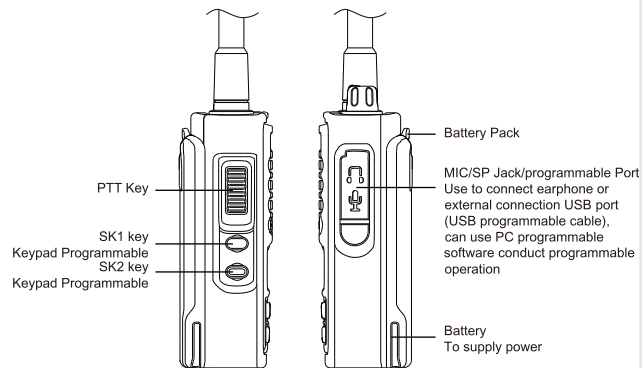
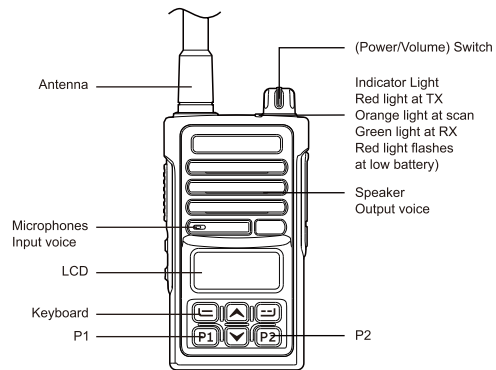


■ Installing Speaker/Microphone

Lift the headphone cover and insert the speaker/microphone headset directly into the speaker/microphone Jack.



Getting Familiar



Getting Familiar

Basic Use of Keyboard:

- ☰ Menu key, confirm key.
- ⬆ Up key.
- ⬇ Down key.
- ⏪ Return key, long press back to Menu.
- Ⓜ Defined programming Key (can be set long/short press function).
- Ⓜ Defined programming Key (can be set long/short press function).

Note: Under the emergency situation, long press the programmable key (sk1 key) can open the emergency call function. Before the machine is activated, it is necessary to run the DMR programming software (upper computer) to set up the walkie talkie.

Getting Familiar

Primary Menu	Secondary Menu	Illustration	Remark
Contact	Contact	Contact list, programming software edit, new contact add or call record contact add, store up to 1024 group contacts. Select the call ID number of the other side (up to 8 digits, the full page ID is fixed to 16777215), then press the confirm key, can be call prompt, inter-phone detection, remote monitor, Active, Kill. Whether the above functions is open to the PC Programmable.	Only digital channel
	Name Display	Turn off: Digital channel incoming/ outgoing does not display name, it only displays ID number. Turn on: Digital channel incoming/ outgoing display name.	
Message	Inbox	Receive list: received the most recent SMS, maximum storage 16, if continue to receive, loop overwrite storage.	Only digital channel
		Delete all: delete all received message.	
	Outbox	Save the newest send message, can be store up to 16 pieces of sending messages.	Only Digital channel. PC Programmable

Getting Familiar

Primary Menu	Secondary Menu	Illustration	Remark
Message	Preset short message	The PC can write directly, and can store up to 32 short messages. Each short message can input 144 characters or 72 Chinese characters.	Only Digital channel. PC Program-mable
Call Record	Dialed call	List of dialed calls: up to 32 latest dialed call records can be stored, which can be accessed or stored to contacts through operations. Delete all: clear list of all records.	Only Digital channel. PC Program-mable
	Received call	List of incoming calls: recent received call records can be stored up to 32, which can be accessed or stored to a contact by operation. Delete all: clear list of all records.	
	Missed call	Missed call list: 32 recent received call records can be stored up to 32, which can be accessed or stored to a contact by operation. Delete all: clear list of all records.	

Getting Familiar

Primary Menu	Secondary Menu	Illustration	Remark	
Setting	Inter-phone setting	CTCSS/DCS	CTCSS: directly set UP and DOWN key decoding and encoding; Decoding: only change decoding, coding unchanged; Coding: only coding change, decoding unchanged; Press P1 key to switch CTCSS or DCS, and then press Confirm key. Press the P2 key or Return key to return.	Only analog channel
		Squelch	Strict/normal optional, factory default normal.	PC Program-mable
		TX Power	High/low optional, high power: UHF 4W low power: 1W	
		Talk Around	Talk around on/off. Workable of being chosen by PC program for the current channel	
		Wide/Narrow band	Wide/Narrow band can be optional in analog channel mode. Wide band: 25KHZ, Narrow band: 12.5KHZ.	Only analog channel

Getting Familiar

Primary Menu	Secondary Menu	Illustration		Remark
Setting	Inter-phone setting	Busy Channel Lockout	Off/Carrier (CTCSS/color code optional, Off: no busy channel lockout, Carrier: matched carrier prohibit PTT: CTCSS/color code: matched CTCSS/color code prohibit PTT.	
			TOT	OFF/15s/.../495s optional, close to the launch time limit of 10 seconds early warning, time to stop launch.
		VOX	Off/on, voice control sensitivity "the PC sets the overall sound control transmission sensitivity level (1-10 level)" can be set, level 1 is the highest level of sensitivity, and level 10 is the lowest level of sensitivity.	PC Programmable
		Digital Encryption	Turn off/on. Only both parties match encryption to communicate.	Only Digital channel. PC Programmable
		Power Save	Off/on, power saving ratio 1:4	

Getting Familiar

Primary Menu	Secondary Menu	Illustration		Remark
Setting	Inter-phone setting	Beeper	All /call permission/keypad	
		Back-light	Keeping /Off /5 seconds/ 10 seconds/optional.	
		Keypad lock	Manual/5 seconds/10 seconds/15 seconds. Choose manual mode, long press return key 2 seconds to lock, press return key unlock.	
		Indicator	On/off .No indicator for TX, RX and scanning when choose off .	PC Programmable
		Mode	Serial number (channel serial number)/name (host computer channel name can be edited/frequency (display received transmission frequency).	
		Boot screen	Picture/Preset character (two lines. PC programmable).	

Getting Familiar

Primary Menu	Secondary Menu	Illustration		Remark
Setting	Inter-phone setting	Language optional	Korean/English and/Chinese/English optional, Korean/English and Chinese/English display changeable including all interface of menu, call indication and call record etc.	PC Programmable
			Local Number	
	Radio Information	Equipment Information		Model information, serial number, CPS version, hardware version, firmware version, DSP version, programming time.
		Radio Configuration	RX Frequency	Only can see.
	TX Frequency		Only can see.	
	Channel name		Only can see.	
	Color Code		Color code 0-15 selectable.	Only digital channel, analog channel can't be set
	Time Slots		Time slot 1or 2 selectable.	

Getting Familiar

Primary Menu	Secondary Menu	Illustration		Remark
Setting	Keypad Programmable	Short press SK1 key	<p>There have some functions can be choose:</p> <ol style="list-style-type: none"> 1.None function 2.Hint on/off 3.Emergency mode on 4.Emergency mode off 5.High/low frequency selection 6.Monitor(support analog, digital can monitor different ID number) 7.Noise channel temporary deletion 8.one touch to access 1 9.One touch to access 2 10.One touch to access 3 11.One touch to access 4 12.One touch to access 5 13.One touch to access 6 14.Repeater/talk around 15.Scan on/off 16.Encryption on/off 17.VOX launch on/off 18.Zones switchable 19.Battery power indicator 20.Alone worker on/off 21.Exit phone 	
		Long press SK1 key		
		Short press SK2 key		
		Long press SK2 key		
		Short press P1 key		
		Long press P1 key		
		Short press P2 key		
		Long press P2 key		

Getting Familiar

Primary Menu	Secondary Menu	Illustration	Remark
Zone	Zone Name	Area list, can be support up to 250 zones(each zone most can be set 16 channels).	Can be add digital channel and analog channel
Scan	Switch	On/off, Only when channel PC programmable the scan list can turn on the scanning function, the scanning switch can be set to "Scan" by programming Sk1, Sk2, P1, P2, or by entering the scan function from menu.	PC Programmable
	Scanning list	Display the current scanning list, display only.	

Note: SK1 key/SK2 key/P1 key /P2key can use programming software to define long press and short press function. There are some several functions that can be defined:

- 1.No function
- 2.All alert on/off
- 3.Emergency mode on
- 4.Emergency mode off
- 5.High/low Power selection
- 6.Monitor (accept analog, digital can monitoring different ID number)
- 7.Noise channel temporary deletion
- 8.One touch to access 1
9. One touch to access 2
10. One touch to access 3
11. One touch to access 4
12. One touch to access 5
13. One touch to access 6
- 14.Repeater/talk around
- 15.scan on/off
- 16.Encryption on/off
- 17.VOX on/off
- 18.Zone switchable
- 19.Battery power indicator
- 20.Along worker on/off
- 21.Exit phone

Safety

Product safety and RF Exposure for handheld two way radio

Before using this two way radio, please read carefully the attach manual instruction in the random incidental for the safe use of the product and radio-frequency manual.



This radio is limited to professional applications that meet FCC radio-frequency energy requirements. Before using this two way radio, Please read the manual which contains important operating instructions for safe usage, RF Energy/ Awareness, control information and operational instructions for compliance with RF Energy Exposure limits in applicable national and international standards. Also read the operational instructions for safe use.

Overview

■ Switch On

Clockwise to turn on the radio volume knob, there will be a “KADA” sound, message sound and the screen will show up “Welcome”, while the LED indicator lights up and becomes Green color if the battery ID full charged.

Note: if the volume function is forbidden, there will not any sound when power on. Here, need to power off the radio and anticlockwise with knob until a “KADA” sound. Boot custom character content of PC can be set.

■ Adjust Volume

Clockwise the volume knob to higher the volume or anticlockwise to lower.

■ Launch Calls

Private Call

This radio supports a confirm private call, if the check is confirmed, it is necessary to detect the presence of the target radio before calling the other party.

1. When the default communication address of the digital channel is set to single call ID, press PTT key to initiate a private call for the current contact.
2. On the contact menu, select the private caller to press the PTT key to call the selected private caller.
3. When the programming key is set as a one touch to access digital private call contact, press the corresponding button and then press the PTT key can launch private call.
4. Select the private call contact in the caller/received/unconnected

Overview

number, and press PTT key can launch a private call.

Group Call

1. When the default communication address of the digital channel is set as group call, can press the PTT key to launch group calling.
2. On contact's menu, select group ID then press PTT key to launch a group calling.
3. In the dialed records/received/unanswered number select group call, press PTT key can launch the group call.
4. When the programming key is set as a one touch to access digital single call contact, press the corresponding button and then press the PTT key can launch single call.

All Call

1. When the default communication address of the digital channel is set as all call ID, can press PTT key to launch all calls.
2. On the contact menu, select all call ID then press PTT key to launch all call.
3. In the dialed records/received/missed number select all call ID, then press PTT key can launch all call.
4. The receiver of all call can not answer all call.

Note: If the call prompt setting is enabled, press the PTT key for transmitting, the transmitter and receiver will hear a fixed hint tone.

■ Launch and Receive Calls

In the digital mode, received a private call and the interface display a private call, during the private call pending time, press PTT key can

Overview

respond the current private call. Beyond the pending time is record as missed call. Received the group call, the interface displays group call. In the group call pending time, press PTT key can respond the current group call, beyond the pending time is record as missed call. Received the all call and the interface display all call, the all call does not have hand up time, so can't respond the all call.

Note: 1. If set the channel free instructions, when transmitter press PTT key, receiver will hear a short hint tone.

2. when the name display in the digital contact is set to closed, the calling in/out of the digital channel will not show the name, but only show the ID number, when the setting is on, digital channel calling in/out display name.

Menu Operation

■ Contacts

Contacts can be viewed contact list (up to 1024 digital contacts can be added)

1. Group Call Type

When the selected the directory member type as group call, group caller can view group call ID or sent message.

2. Private Call Type

When the selected contact member type as private call, to the private caller contact can view contacts, send call prompt, the detection, the remote monitoring, the activation or remote killing operation.

● **Call prompt:** send a call prompt to assigned private call contact, requesting the other reply when communicating. The interface will display call prompt and prompting bell when the other receive the call prompt (there are 10 ring tones to choose). If the other party can not receive, it will prompt the cal prompt failure.

● **Radio detection:** radio detection allows user to determine whether the radio is in a state of activity in the system without any instructions to the radio user. If received the respond, the successful radio interface shows that the radio detection is successful. If the respond is not received in a certain time, there is a failure prompt and the interface shows radio detection failed.

● **Remote monitor:** send the remote monitor request, if received the remote monitor confirmation, it has successfully entered the reception interface display.

If not confirmation is received in a certain time, prompt the failure hint and the interface displays the remote monitor failed. Only when

Menu Operation

the device's signaling system "remote monitor decode" is checked, can be allowed to monitored voice activities.

● **Radio activated:** This function can activated the dead device and make the target radio resume its normal working statue.

● **Radio kill:** Sent radio kill command, if received the respond, the radio interface shows kill successfully and has a successful hint .If the respond is not receive in a certain time, the radio interface shows kill fail and has a failure hint.

When the signaling system receiving the radio configuration of device's kill decode is checked, can receive the radio's kill command. After being killed, the device disables all interfaces and only process the received telemetry command.

3. All Call Type

When selected contact type as all call, can view all call ID: 16777215.

Note: This radio allowed to add group call type's and single call type's contact. After input number (1~16777214), the maximum can input sixteen characters. Name input is completed, press the selected tone then press confirmation to save. After successful preservation on the interface notice: save succeed. New contact can be found in the contact list.

■ Name Display



When the name display in the digital contact is set to closed, the calling in/out of the digital channel will not show the name, but only show the ID number.

When the setting is on, digital channel calling in/out display name.

Menu Operation

■ Message

1. Inbox

The inbox can store up 16 received messages, which display on the top of the inbox menu(*/*), the front number is selected messages, and the number in back is the total number of messages of the inbox. Enter the pickup list, don't read message indicates , read messages indicated . Inbox messages have the reply, forward, delete options can operate. Delete all will delete all messages, it can save the trouble to delete message one by one.

2. Outbox

You can enter the outbox to check the content of sent message, and you can store up 16 messages. Text message can be resent, forward, edited and delete. Delete all will delete all messages, it can save the trouble to delete message one by one.

3. Preset Short Message

Through programmable software to add present short messages, and you can store up 32 present short messages, each short message can input 144 characters. Present messages can be sent directly.

Note: 1.Prefabricated messages can be allocated to one touch function call, and then sent prefabricated message quickly through programming keys.

2.Present message can't be deleted, only can through programmable software to delete.

Menu Operation

■ Call Records

1. Dialed Call

The radio will record the recently exhaled call, with a dial of up to 32 exhaled call. When the number is full, the earliest record will be delete automatically when have a new record.

2. Received Call

The radio will record the recently incoming call, the number of which has been received at most 32 incoming calls, when the number is full, the earliest record will be delete automatically when have a new record. And the received calls also can be viewed or deleted. Delete all will delete all received call records, it can save the trouble to delete message one by one.

3. Unanswered Call

The radio will record the recently unanswered call, the unanswered call most can store up 32 unanswered calls, when the unanswered call is full, the earliest record will be delete automatically when have a new record. And the answered call also can be viewed or delete. Delete all will delete all unanswered call records, it can save the trouble to delete one by one.

Function Settings

■ Radio Setting

This function provides some parts of radio's basic setting for user.

● **Infra-acoustic Frequency (Only support analog channel):** The radio analog channel supports the function to ensure the quality of the call ,when channels active ATRS function, it must be have the subsonic function (this function can be set in the programmable software). Voice output is allowed when the received subsonic is transmitting. Analog subsonic can be set, (press P1 key to switch digital subsonic, analog subsonic and close). Selected a subsonic value from the exiting list to encode or decode, (the specific subsonic value is referred to the CTCSS frequency table and CDCSS digital code table).

1.Decode: The radio of receiver will decode the sub-tone sent by the transmitter. The subsonic set up here matches the subsonic from the sender can open the loudspeaker and output the voice.

2.Code: Before sending the voice, the transmitter terminal sub-codes the subsonic, which is added to the voice and encode through the carrier. The receiver opens the speaker and outputs the voice when it receives the matching of the sub-tone set here.

Note: Analog channel support setting non-standard analog subsonic function (range 60Hz~259.9Hz) and non-standard digital subsonic (range 001~777), and the coding and decoding of the programmable software also can manually input non-standard subsonic values.

Function Settings

CTCSS (Hz)					
67.0	69.3	71.9	74.4	77.0	79.7
82.5	85.4	88.5	91.5	94.8	97.4
100.0	103.5	107.2	110.9	114.8	118.8
123.0	127.5	131.8	136.5	141.3	146.2
151.4	156.7	159.8	162.2	165.5	167.9
171.3	173.8	177.3	179.9	183.5	186.2
189.9	192.8	196.6	199.5	203.5	206.5
210.7	218.1	225.7	229.1	233.6	241.8
250.3	254.1				

Standard DCS Code									
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						

● **Squelch:** Filtering out the intensity is not enough to generate clear incoming signals to eliminate unwanted noise. The lower the noise level, the easier to receive the signals. And at the same time, it will be affect the interface of the useless calling. The higher the noise

Function Settings

level, the more useless calls will be filleted. However, calls from remote locations will be filleted out. The level of 0-9 can be selected, and the default setting is users can set the suitable squelch level according their needs.

- **Transmitting Power:** Allow users adjust the radio's transmitting power high/low by menu. High power display: H, low power display: L.
- **Talk Around:** When the radio works in the repeater mode, but the transfer service is not available, the radio can open the talk around function to enter communicate. When open the talk around function, the screen will display **↔** and enter the talk around mode, the radio use TX frequency to transmitted, so the two radios can achieve communicate directly.

Note: 1.If want to enable this function, the RX frequency and the TX frequency must be different, and the channel must check the talk around function by programmable software.

2.If the side key set as repeater/talk around function, also can open the talk around function.

- **Wide/Narrow Band(only support analog channel):** Allow users set up the radio's wide/narrow band by menu. Select wide band the main interface is not displayed, and the N is displayed when selected narrow band.


- **Busy Channel Lockout:** Allow users select a state of lockout by menu, select turn off, busy channel lockout can't work. Select carrier, this channel is not allow transmit when with carrier. Select subsonic/ code, this channel is prohibit launching when the subsonic or code is matched.

Note: If the transmission prohibits fast key over overwrite check of programmable software overall setting, when the channel

Function Settings

is busy, press the launch key twice within one second can launch again.

● **Time Out Timer:** Time out timer function can prevent the current channel occupied too long by single user. For the much busier channel, can set much shorter TOT. If the continuous launching time exceed the set value, the radio has the “beep” warning sound, and automatically terminate the launch. TOT can set by programmable software, 15-495 seconds, default 60 seconds, step 15 seconds.

● **VOX:** Sounds control let you don't press PTT key when launch, when the function is opened, the launch operation can be launch directly through the voice. When the voice stops, the launch is automatically ended. It allows users open the VOX control by menu, and the screen shows . The overall setting in programmable software can be set of 1~10 levels, or set turn on/off in the channel.

● **Digital Encryption (Only supports digital channel):** Voice encryption function can ensure the language communication safety. Allows users select turn on/off or through radio's menu or by software select basic encryption function and set encryption key by radio menu. Open the radio's encryption function, the voice encryption function is same and the encryption key is same can communicate. If your radio receive different encryption key's call, then you will hear confusion.

Note: The voice encryption function only valid in digital mode.

● **Power Save:** Enable this function can make the free radio automatically enter the power save mode, power save mode can extend the battery's life, but will causes the respond time delay. The waking time is 1:4, after the radio enter the power save mode. The main interface shows 1:4 after opened the power save.

Function Settings

Note: The power save is invalid when open the double capacities directly mode.

● **Power Save:** Enable this function can make the free radio automatically enter the power save mode, power save mode can extend the battery's life, but will causes the respond time delay. The waking time is 1:4, after the radio enter the power save mode. The main interface shows 1:4 after opened the power save.

Note: 1.The power save is invalid when open the double capacities directly mode.

● **Prompt Tone:** Allows users turn on/off prompt tone by menu. Including all tones, call licenses and keyboard setting, all tones control all hints, including the voice number, if turn off all hints, the alarm sounds also can still played normal.

● **Backlight:** Allows users to change backlight setting by menu, backlight can both control the screen and keyboard light at the same time. That is often open, often off, 5 seconds, 10 seconds, can optional. If the choice is 10 seconds, the radio will not carry out any key operation and the backlight will extinguished within 10 seconds. It choose to open often, the backlight will be bright.

● **Keypad Lockout:** Allows users select automatic lock time and manual lock or long press “return” key to lock the keypad by menu. Keypad lock in addition PTT key, side key can't carry out other key operation. Long press return key to unlock.

● **Indicator Lights:** Allows users turn on/off the LED indicator lights of the radio by menu, if necessary, set turn off the LED indicator light, it will prohibit the launch and reception of scan and the LED lights are not bright. Users should be careful turn off the LED indicator light, this setting will not effect the screen and keypad backlight.

Function Settings

● **Mode Selection:** Allows users select serial number, name, frequency channel display mode by menu, the main interface will displayed according to the selected mode.

● **Power on Interface:** Users can selected pictures or preset characters in different power on style according to preference, and can modified the picture by programmable software and preset characters.

● **Language Selection:** it can support three languages of Chinese/Korean/English.

Note: Korean/English and Chinese/English do not support text message.

■ Radio Information

● **My Number:** Allows users to query this radio's ID number by menu, which can only be accessed not set (Only can modified the settings by programmable software).

● **Facility information:** Allows users to query radio's facility information by menu, which including type information, serial number, CPS version, hardware version, firmware version, DSP version and the programmable time (also can read through by programmable software).

■ Radio Configuration

● **RX Frequency:** check the current channel RX frequency (it can be modified by programmable software).

● **TX Frequency:** check the current TX frequency (it can be modified by programmable software).

● **Channel Name:** check the current channel name (it also can be modified by programmable software).

● **Color Code (Only support digital channel):** Users can modify

Function Settings

the color code according their needs, there are 0-15 optional (it also can modified by programmable software).

● **Time Slot (Only support digital channel):** Users can modify the time slot according their needs, there have time slot 1, time slot 2 options (it also can modified by programmable software).

■ Keypad Programmable

Users can set up SK1 key, SK2 key, P1 key, P2 short press and long press function in the radio programmable menu by there needs.

There are several function as follows:

1. None function
2. Beeper on/off
3. Emergency mode on
4. Emergency mode off
5. High/low frequency selection
6. Monitor (support analog, digital can monitor different ID number)
7. Noise channel temporary deletion
8. one touch to access 1
9. one touch to access 2
10. one touch to access 3
11. one touch to access 4
12. one touch to access 5
13. one touch to access 6
14. Repeater/talk around
15. Scan on/off
16. Encryption on/off
17. VOX launch on/off
18. Zones switchable
19. Battery power indicator
20. Lone worker on/off
21. Exit phone

Note: When select “emergency on” or “emergency mode off”, the same button short or long press will be related each other.

Zone

The radio can support 250 zones at most, one zone can add 16 channels at most, 250 zones can support 4000 channels at most. Through the menu zone options, you can enter the selected zone in

Function Settings

the zone list, or set as zone switchable function in the programmable keypad, and then the enter the zone switchable (it should be set two or more zones can make the zone switchable).

Scan

- Your radio can support 16 scanning list at most and with a maximum of 32 members for per scan list, each scan list supports a mixture of analog and digital channel, you can add/delete channel or set priority for the channel by editing scanning list. The scanning modes support time scan and carrier scan.

- The current channel scan list add the scan group contains at least 2 channels to open the scan channel function. When scanning, listen to the channels in the scan list and check whether there have the voice activities in each channel. If set the priority level, open the scan, the screen displays the distinction of scan logo, no priority displays **Z**, priority 1 displays **Z**, priority 2 displays **Z**, the LED indicator light flash orange. When scanning is active to a certain channel will stop to receive. If receive the unnecessary call, press programmable key noise channel to temporary delete and it can temporarily removed from the current channel in the scanning list. If want to close scan, can long press keypad programmable key quickly enter scan off or enter scan menu to select scan off, switch the channel or press programmable key scan on/off to exit the current scan.

Note:1. If channel checks the automatically scanning function, when switched to this channel, the device automatically enter scan.

2. When programmable key function is set to scan turn on/off, it can be opened scan directly by programmable key.

Function Settings

■ Digital Emergency Alarm

Emergency mode is used to express emergency situation. You can launch emergency alarm at any time in any screen to enter emergency mode. This radio supports three alarm types, three kinds of emergency alarm.

Emergency Types:

Routine: When the radio launch the emergency alarm, the screen displays emergency mode and the alarm tone are continuously played.

Silence: When launch an emergency alarm, there is no prompt on the screen and no alarm bell is played, and no voice calls that match the reception are played.

Silence with Voice: When the radio launch the emergency alarm, there is no prompt on the screen and no alarm bell is played, but any voices calls that match the reception are played.

Emergency Modes:

Emergency Alarm: The radio launch the emergency alarm, when receive the confirmation or trail times then will exit the “emergency” mode.

Emergency Alarm and Calls: Once press “emergency alarm” key, it will sent emergency alarm, then can through press PTT key to launch emergency call.

Emergency Alarm and Voice: Once press “emergency alarm” key, it will sent emergency alarm, then the voice can be sent automatically.

● Sent Emergency Alarm

The current channel adds an emergency system and reply channel set as the channel. Then can sent emergency information at the

Function Settings

current channel. Press the set emergency mode to turn on function key, LED indicator light flash red, the upper screen displays “emergency alarm” and alarm group calls contact and group calls.

● Exit Emergency Alarm

In normal+emergency alarm mode, when the number of attempts to send an alarm arrives or press the set emergency mode turn on function key, exit the alarm. Or press PTT key will automatically alarm mode. In the unconventional alarm mode, press the set emergency mode turn on function key to exit alarm mode.

● Receive Emergency Alarm

If activated, your radio will automatically confirm emergency alarm. When radio receive the emergency alarm, the interface will display emergency alarm, the ID or name of the alarm initiator, and continuously played the prompt. Otherwise there is no hint. Exit emergency alarm, press emergency alarm turn on function key.

DTMF

Analog Channel, DTMF function allow radio system with interference to operate radio in the radio system.

1.Initiating: Under analog mode, press the programming key to start the DTMF call (programmable key should preset one touch key to connect DTMF calling ID number then can be used). After confirm the hint played, then press PTT to talk.

2.Receiving: Programmable software set the receive signal of current channel is DTMF, when the decode number is DTMF personal ID number, decode succeed and played bells, and can communicate with the other in the reset time. When the reset time comes, it needs to decode again. The decode number as kill code or waken code

Function Settings

and the machine will be killed or awakened.

PTT ID

Initiating: Under analog mode, it can set the line code and down line code of DTMF by programmable software, analog channel enable line and down line code, each time press PTT send line code, release PTT sent down line code.

Encryption

You can use digital or analog way to initiate or remote kill in the radio system. For example, you may want to stop using a stolen radio to prevent thieves from using it and enable it when recovering.

Note: The execution or activation of the radio is limited to open (set up on programmable software) the function of radio.

Lone worker

Work alone can suitable to the individual working in an unexpected situation during work, and can't make keystrokes or voice launch in the preset time, and the radio can automatically enter alarm to get help. By checking the “work alone” option from programmable software digital mode channel, the overall settings set up a work alone response time and reminder time. The response can be selected as keystroke operation and voice launch.

Note: 1.Only support digital mode channel.

2.When an emergency system is not selected, this function is disabled.

Function Settings

Battery Level

Press the pr-programmable key can view the remaining battery voltage, so that users can understand battery usage and charge the battery timely. The main interface battery displays.


Bluetooth Function (optional)

●Bluetooth earpiece connection operation method: turn on the bluetooth function of the walkie talkie with bluetooth, then press the power button of the bluetooth earpiece, the walkie-talkie will automatically search for bluetooth earpiece, after the bluetooth connection is successful, the bluetooth logo on the walkie-talkie screen will change to black. And you can perform related operations according to the bluetooth earpiece that you selected.

●Regular bluetooth earpiece: when the bluetooth earpiece is connected to the walkie-talkie, you can use bluetooth to talk to other walkie-talkies. Wear the bluetooth earpiece, hold down the PTT button, and speak, you can remote control the walkie-talkie to transmit, release the PTT button, and wait for reception.

Note: The bluetooth icon will display on the menu only when this function is selected, otherwise it will not .

Defaults for Factory Reduction

- In the showdown mode, press top key and number key 1 at the same time then turn on, the radio displays "Memory Reset?" press  key to enter initialization, the radio displays "Memory Reset..." 5 seconds or so to initialize succeed and power on normal.
- Power failure is not allowed during initialization, otherwise initialization fails.

Troubleshooting

Symptom	Try This
No power	<ul style="list-style-type: none">● Battery power may have run out, please update battery or recharge it.● Battery may not be properly installed, please take it off and re-install.
Battery lasts a short time after charge	<ul style="list-style-type: none">● The battery life is over, please replace new battery.
Can not talk to other members of your group	<ul style="list-style-type: none">● Verify transmitting is within effective operating range.● Verify channel, frequency and code settings are correct.
Hearing other conversation on a channel (not group members')	<ul style="list-style-type: none">● Please change code settings, including all two way radio settings of your group.

Warranty Card

Contact: _____
Company Name: _____
ADD: _____ Post Code: _____
Tel: _____ Mob: _____
Fax: _____ Email: _____
Purchasing: _____ Model No.: _____
Serial No.: _____ Purchasing Date: _____
S/N: _____ (EAN) _____
Warranty Card No.: _____
Trouble Description:

Terms and Conditions

- 1) This warranty is provided only for product purchased from authorized dealer of hereinafter called.
- 2) Warrants this product to be free from manufacturer's defects for a specified period.
- 3) Within the specified warranty period, will repair or replace non consumable parts (excluding casing, accessories, batteries, cable and consumable) that are damaged under normal use (by judge of) at no additional charge.

- 4) The warranty will not be covered under the following conditions.
A, Out-of-warranty products.
B, The product is modified without approval.
C, Obvious attack of appearance whatever it is.
D, The product is subjected to unusual physical or electrical stress, including physical damage ,burnt components and broken connectors, and watered radio.
E, The serial number label is removed or altered.
- 5) This warranty card must be presented together with dealer's invoice when the defective product is returned for repair. Otherwise, reserve the right of not providing free warranty during the warranty period.
- 6) The customer is responsible for returning the defective product at his own expense.
- 7) Your warrant period is calculated from the date of invoice of this product.