

DJ-MD5

PC Software Guidance

Ver, 1.00
2018/08/16

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I Public

1. Channel

Click to Channel to add channels and input the desired frequencies.

No.	Receive Frequency	Transmit Frequency	Channel Type	Power	Band Width	TCSS/DC Decode	TCSS/DC Encode	Channel Name	Contact
1	440.00000	440.00000	D-Digital	High	12.5K	Off	Off	Channel 1	Contact 1
2	155.00000	155.00000	D-Digital	High	12.5K	Off	Off	Channel 2	Contact 1
3									

Click to each channel to open the below console.

Channel Name: Channel 1

1 Receive Frequency: 440.15000
Transmit Frequency: 440.15000
Channel Type: D-Digital
Transmit Power: Low
Band Width: 12.5K
TX Permit: Always
Scan List: None

☐ TX Prohibit ☐ Talk Around
☒ Work Alone ☐ Through Mode

2 Digital
Contact: Private
Radio ID: My Radio
Color Code: 1
Slot: Slot1
Receive Group List: Group List 1
Digital Encryption: Off
Encryption Type: Normal Encryption

☐ Simplex TDMA ☐ Call Confirmation
☐ TDMA Adaptive ☐ Ranging

3 Analog
CTCSS/DCS Decode: Off
CTCSS/DCS Encode: Off
Squelch Mode: Carrier
Optional Signal: Off
DTMF ID:
2Tone ID: 1
5Tone ID: 1
PTT ID: Off

☐ Reverse
2TONE Decode: 1
Custom CTCSS: 251.1

OK Cancel Previous Next

① Frequency, call type, power

Receive frequency

Input the desired receiving frequency of channel.

Transmit frequency

Input the desired transmitting frequency of channel.

Channel type

There are 4 types of channel model you can select.

A-Analog: Set up to analog channel.

D- Digital: Set up to digital channel.

A+D TX A: Mixed analog, allow receive analog and digital signal, TX is analog. D+A TX D: Mixed digital, allow receive analog and digital signal, TX is digital.
Transmit Power There are 4 modes of power you can select. Small: 0.2W Low: 1W Mid: 2.5W High: 5W
Band width Analog channel 25Khz : Wide band width 12.5Khz: Narrow band width Digital Channel 12.5Khz: Narrow band width only
TX Permit Always: Always permits transmit. Channel free: Allow transmit when the channel is free Different color code: Allow transmit when receive a matching carrier signal but different color code. Same color code: Allow transmit when receive a matching carrier signal and it has same color code.
Scan list Select the scan list for the current channel. To create the scan list go to Public➔ Scan list. To activate the scan, press the programmed key with scan function is assigned. Radio starts scan when the current channel is selected a scan list, it will scan the current channel and all the channels in the scan list.
TX prohibit Select to prohibit transmit on current channel.
Work alone Select the Work Alone for the current channel
Talk around Select the Work Alone for the current channel

② Digital Channel Setting

Contact There are 3 call types you can set for a digital channel. Private call: A private user to a private user Group call: All member in a group All call: Any user who is using the same channel frequency
Radio ID Select the ID for radio from ID list. The ID list is created in: PC Software ➔Digital Radio ID List➔ Radio ID
Color code Select the color code. 2 radios with different color code could not communicate to each others. When set the radios and use repeater all the radios need to set color code same as repeater.
Slot Select the time slot, there are time slot 1 and time slot 2.

Receive group list Select the receive group list. Create the receive group list go to Digital ➔ Receive Group Call List.
Digital encryption Select the digital encryption for the call. There are 32 selectable encryption codes.
Encryption type Normal Encryption; Normal secure Enhanced Encryption: More secure
Simplex TDMA Select the Simplex TDMA for the current channel.
TDMA Adaptive Select the TDMA Adaptive for the current channel.
Call confirmation Select the call confirmation for the current channel.
Ranging Select the ranging for the current channel.

③ Analog Channel Setting

CTCSS/DCS Decode Select Off or CTCSS, DCS when receiving the signal to decode tone.
CTCSS/DCS Encode Select Off or CTCSS, DCS when transmitting the signal to encode tone.
Squelch Mode: Carrier: You can hear the call when the channel receives a matched carrier. CTCSS/DCS: You can hear the call when the channel receives a matched CTCSS/ DCS signal. Optional Signal: Select the optional as 5Tone, 2Tone, DTMF. CTC/DCS& Optional Signal: You can hear the call when the channel receives a matched CTCSS/ DCS and matched tone signaling. CTC/DCS Optional Signal: You can hear the call when the channel receives a matched CTCSS/ DCS or matched a tone signaling.
Optional Signal: Off: No Optional signal is selected when transitting. If you select DTMF/ 2Tone/ 5Tone as an optional setting then need to go to Analog ➔ 5Tone Setting/ 2Tone Setting/ DTMF Setting.
DTMF ID Select DTFM ID
2Tone ID Select 2 Tone ID
5Tone ID Select 5 Tone ID
PTT ID Select each option: Off, Start, End, or Start&End
Reverse Select to reverse the TX and RX frequency, when this is selected the CTCSS/DCS also are interchanged.

Custom CTCSS

Enter value when requiring a custom CTCSS tone

2. Zone

Create the zone of channels. After programing into radio, select the desired zone and then select the channel you want to use.

DJ-MD5	No.	Name	Zone Channels	A Channel	B Channel
Public	1	Zone 1	4	AllCall	PrivateE
Channel	2	Zone 2	2	PrivateE	Group
Zone	3				
Scan List	4				
FM	5				
Auto Repeater Off					

Name

Shows the name of zones

Zone Channels

Shows the channels are selected in the zone

A channel

The channel will be shown on the display of A channel when select a corresponded zone

B Channel

The channel will be shown on the display of B channel when select a corresponded zone

Click to each zone to see the details setting.

[illegible]

Available Channel
Show the channels are created in the channel list
Zone Channel Member
Show the channels will be displayed in radio when you select a corresponded zone
A Channel
Select the channels will be shown on the display of A channel when select a corresponded zone
B Channel
Select the channels will be shown on the display of B channel when select a corresponded zone

3. Scan List

Select the desired channels to the scan list.

No.	Name	Channels	Scan Mode	Priority Channel 1	Priority Channel 2	Look Back Time A[s]	Look Back Time B[s]	Dropout Delay Time[s]	Dwell Time[s]
1	Scan List 1	4	Off	Off	Off	2.0	3.0	3.1	3.1

MD5
Public
Channel
Zone
Scan List
FM
Auto Repeater Off
Basic Information
Optional Setting
Alarm Setting
Local Information
Hot Key
Digital
Radio ID List
Talk Groups
Prefabricated SMS
Receive Group Ca
Encryption Code
Digital Contact List
1---20000
20001---40000
40001---60000
60001---80000
80001---100000
100001---120000
120001---140000
140001---160000
Friends List
Analog
Analog Address Bk
5Tone Setting
2Tone Setting
DTMF Setting

DJ Scan Edit---1

Scan List Name:

Available Channel

Scan Channel Member

1 PrivateE

2 Group

3 AllCall

4 Analog

>>

<<

Priority Channel Select
Off
Priority Channel 1
Off
Priority Channel 2
Off
Revert Channel
Selected
Look Back Time A[s]
2.0
Look Back Time B[s]
3.0
Dropout Delay Time[s]
3.1
Dwell Time[s]
3.1

Order By ID Name Up Down
OK Cancel Previous Next

Available Channel

Show the channels in the channels list

Scan Channel Member

Select the desired channel to the scan list

Priority Channel Select

Select off or the priority type to the channel.

One you selected a priority type go to Priority Channel 1 or Priority Channel 2 to select the desired channel

Priority Channel 1

This option allows users to select a channel in the scan list as Priority Channel 1. If only Priority Channel 1 is set, 50% of a radio's scans are on Priority Channel 1 during scanning. If Priority Channel 2 is set to Off, scans for Priority Channel 1 is reduced from 50% to 25%.

Off: No channel is set as Priority Channel 1. If Priority Channel 2 is available, scans for Priority Channel 2 increased to 50%.

Priority Channel 2

This option allows users to select a channel as Priority Channel 2. During scanning, 25% of a radio's scans are on Priority Channel 2 if user has defined also a Priority Channel 1. But if Priority Channel 1 is set to Off, scans for Priority Channel 2 will be increased to 50%.

Revert Channel

During scanning, when there is no call received, press the PTT key to transmit on the channel as below.

- Selected
- Selected + TalkBack
- Priority Channel Select 1
- Last Called
- Last Used
- Priority Channel Select 1 + TalkBack

Look Back Time A [S]

During scanning, it will scan the priority channel when check the look back time A every time.

Look Back Time B [S]

Only for analog channel. During scanning, when the priority channel has signal but with incorrect CTCSS/DCS, it will scan the priority channel when check the look back time B every time.

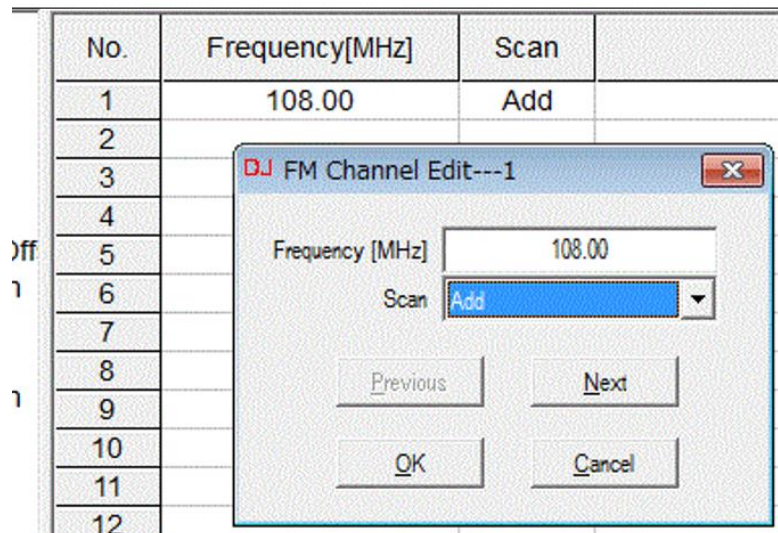
Dropout Delay Time [S]

0.1S – 5S

Only for analog use. When scanning with a signal and starting a transmit, after release the PTT key, the radio will resume scanning after reaching the Dropout Delay Time.

Dwell Time [s]

Only for analog use. When press PTT key to transmit, after release the PTT key, the radio will resume scanning after reaching the Dwell Time.

4. FM**Frequency [MHz]**

The frequency in range of : 76 Mhz -108MHz

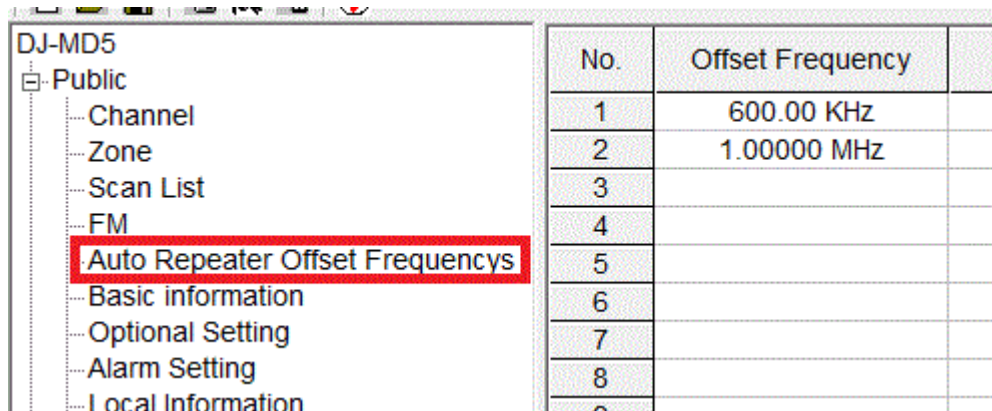
Create the desired channel frequencies for the FM radio.

Scan

Add: Select the channel frequency to the FM scan channel list

Del: Eliminate the channel frequency to the FM scan channel list

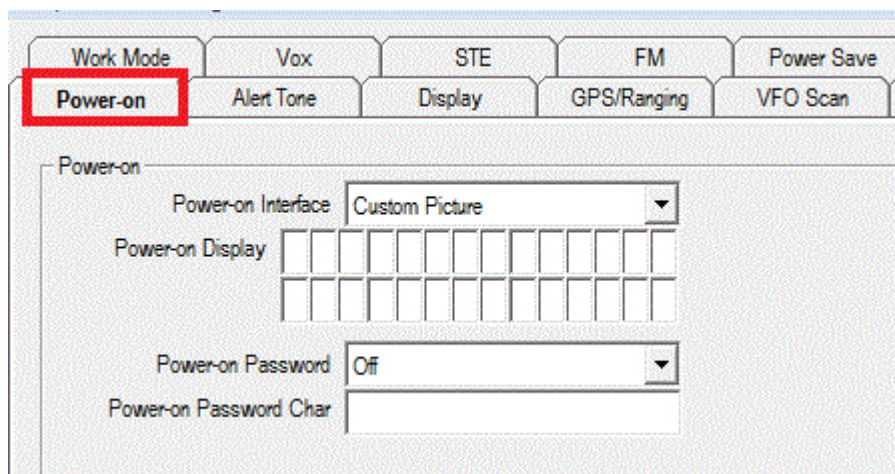
5. Auto Repeater Offset Frequencies



When turning on the Auto Repeater function, the TX frequency in VFO mode will be increased or decreased frequency on the channel A or channel B base on the set up offset frequency. Here to create the desired offset frequency values. To setting the Auto Repeater function go to Public→Optional Setting→Auto Repeater.

6. Optional setting

6.1 Power on



Power On Interface

Custom Interface: User able to change to desired picture.

Custom Char: The radio will display the characters set up in PC software when powered on.

Custom Picture: The radio will display an ALINCO picture when powered on

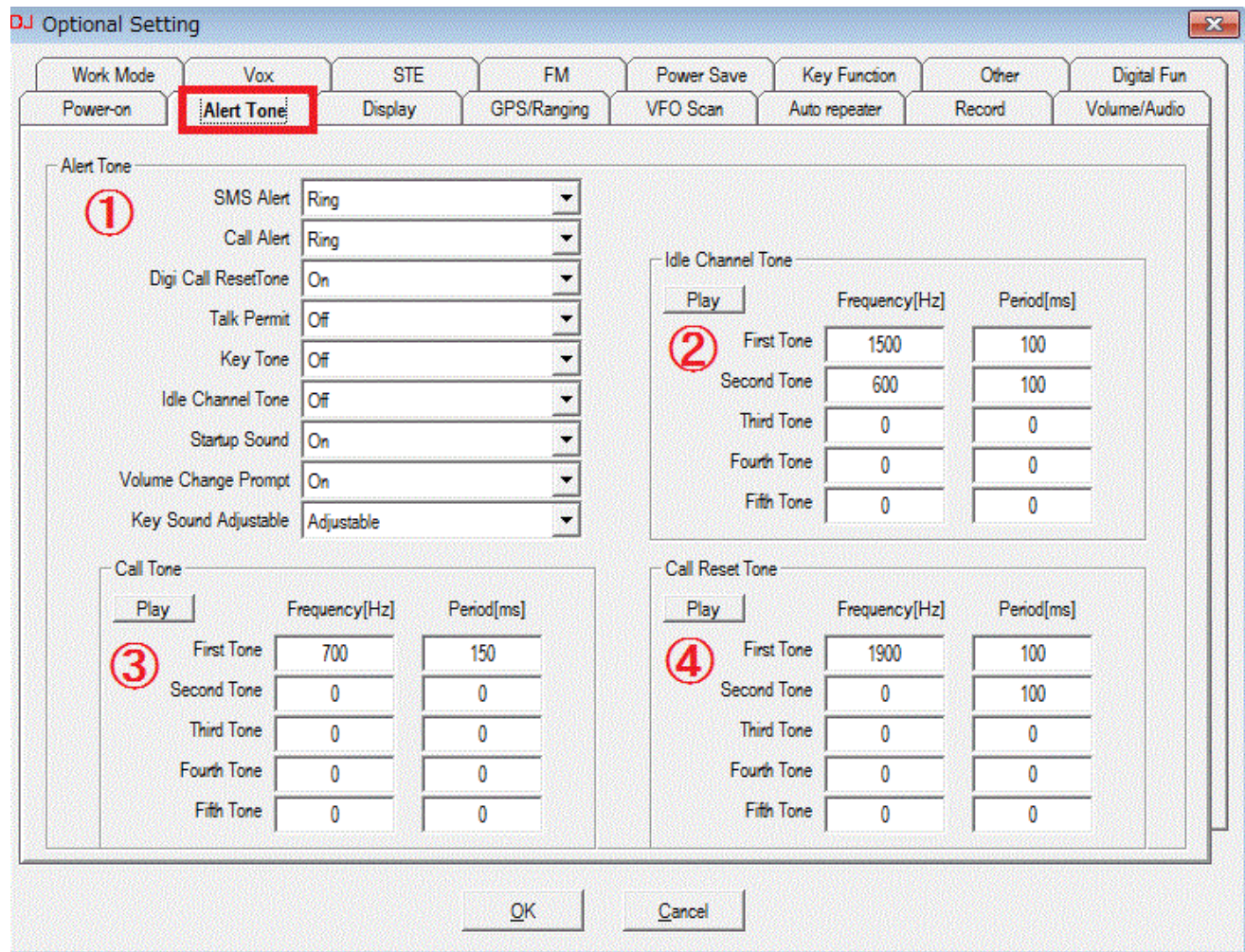
Power On Password

On: Set up the password for start up. You need to input the password to power on the radio.

Note. In Case you forgot the password. Using the PC software to read data and it is able to check password on PC software interface.

Off: No password is required for the radio power on start up

6.2 Alert Tone



①

SMS Alert

None: Radio will not notify when receives a new message

Ring: Radio will notify when receives new message

Call Alert

None: Radio will not notify when receives a call alert

Ring: Radio will notify when receives a call alert

Digi Call Reset Tone

Off: Radio will not sound beep when the hold time terminates.

On: Digital call has a group call hold time and a private call hold time to prevents voice missing after the call. When set Digi Call Reset Tone is on, it will sound beep when the hold time terminates.

Talk Permit

Select Off or Digital or Analog or Digital& Analog

Key Tone

Off: When pressing keypad radio silences

On: When pressing keypad radio sounds tone

Start Up Sound

Off: When powering on, radio silences

On: When powering on, radio sounds tone

Volume Channel Prompt

Off: When dialing the volume knob to change volume level there is no volume bar is shown.

On: Radio shows a volume bar on the screen when dialing the volume knob to change volume level.

Key Sound Adjustable

Adjustable 1 – 15 level for the keypad sound

②

Idle Channel Tone

Select Off or On if the channel is idle radio sounds a tone.

③

Call Tone

Select if you want a tone confirming Digital and/or Analog repeater connection at the start of a call.

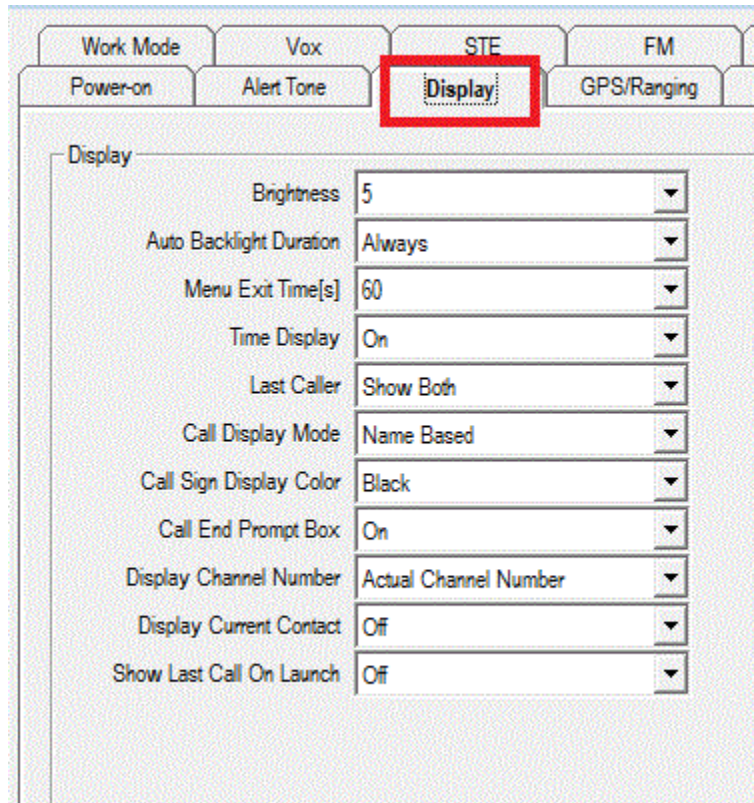
It allows you to program the tone frequency as well as the duration of tones. Click “Play” to hear the tone sound.

④

Call reset tone

It allows you to program the tone frequency as well as the duration of tones. Click “Play” to hear the tone sound.

6.3 Display



Brightness

Level 1-5: Set the display brightness level.

Auto Backlight Duration

Always: Set the backlight always on

5S – 5 Min: Set the time for backlight on

Menu Exit Time

5S-60S: Set the duration time to exit from menu setting

Time Display

Select Off or On to show date, time information in the display

Last Caller

Off: Nothing be shown

Display ID: Displays the ID of the last caller

Display CallSign: Displays the Call Sign of the last caller

Show Both: Displays both ID and Call Sign of the last caller

Call Display Mode

Name Based: Select Name as primary display

Call Sign Base: Select Call Sign as primary display

Call Sign Display Color

Select Red or White color to display the call sign for a call

Call End Prompt Box

Off: No notification box displays when the call end.

On: Displays a notification box indicating the call is end. For example when a private call end radio shows a notification box with content **“Private Call End”**

Display Channel Number

Actual Channel Number:

Sequence Number In Zone:

Display Current Contact

Select Off or On for rotating display of all data on LCD

Show Last Call On Launch

Select Off or On to show last call on channel change

6.4 GPS/Ranging

Work Mode Vox STE FM Power Save
Power-on Alert Tone Display **GPS/Ranging** VFO Scan

GPS/Ranging

Get GPS Positioning Off

Time Zone GMT8

Distance Unit Metric

Get GPS Positioning: Select to get GPS position

Time Zone: Select your time zone

Distance Unit

6.5 VFO Scan

Work Mode Vox STE FM Power Save
Power-on Alert Tone Display GPS/Ranging **VFO Scan**

VFO Scan

Scan Mode SE

VFO Scan Start Freq(UHF) 400.00000

VFO Scan End Freq(UHF) 480.00000

VFO Scan Start Freq(VHF) 136.00000

VFO Scan End Freq(VHF) 174.00000

There are 3 types of scan for VFO scan mode:

TO: When an incoming signal is caught, radio stops scan and stays at the channel 5s before resuming the scan.

CO: When an incoming signal is caught, radio stops scan and stays at the channel until the signal disappears, and resumes scan approx 2s later.

SE: When an incoming signal is caught, radio terminates the scan.

Set the desired scan frequency in a range of start and stop in each UHF and VHF band.

6.6 Auto Repeater

Work Mode	Vox	STE	FM	Power Save	Key Function	O
Power-on	Alert Tone	Display	GPS/Ranging	VFO Scan	Auto repeater	Reco

Auto repeater	
Auto Repeater A	Positive
Auto Repeater B	Positive
Repeater(UHF)	600.00 KHz
Repeater(VHF)	600.00 KHz
Min Freq Of Auto Repeater(VHF)	145.00000
Max Freq Of Auto Repeater(VHF)	174.00000
Min Freq Of Auto Repeater(UHF)	450.00000
Max Freq Of Auto Repeater(UHF)	480.00000

Auto Repeater A

Turn on the Auto Repeater function, the TX frequency in VFO mode will be increased or decreased frequency on the channel A base on the set up offset frequency.

Off: Turn off the function

Positive: TX frequency= RX frequency + Offset frequency.

Negative: TX frequency= RX frequency - Offset frequency.

Auto Repeater B

Turn on the Auto Repeater function, the TX frequency in VFO mode will be increased or decreased frequency on the channel B base on the set up offset frequency.

Off: Turn off the function

Positive: TX frequency= RX frequency + Offset frequency.

Negative: TX frequency= RX frequency - Offset frequency.

Repeater (VHF)

Select the offset frequency for the channel A when auto repeater A is on. To create the frequency offset go to Public → Auto Repeater Offset Frequency

Repeater (UHF)

Select the offset frequency for the channel B when auto repeater B is on. To create the frequency offset go to Public → Auto Repeater Offset Frequency

Min/ Max Freq Of Auto Repeater (VHF)

When auto repeater is turned On.

Set the auto repeater working frequency range, which maximum of range is 136 MHz to 174 MHz. Radio will automatically add the offset frequency value to the VFO frequency if it is

covered in the setting range. The offset frequency is based on the setting of Auto Repeater A as above.

Ex: If the range is set as: 136MHz - 140MHz, and offset value set as Positive 0.6MHz, and VFO TX frequency is 137 MHz then when auto repeater is on, if you press and hold PTT, radio will transmit with TX frequency is 137.6MHz. In case of the VFO TX frequency is set as 145 MHz it is out of range you set then the offset frequency will not be applied when transmit.

Min/ Max Freq Of Auto Repeater (UHF)

When auto repeater is turned On.

Set the auto repeater working frequency range, which maximum of range is 400 MHz to 480 MHz. Radio will automatically add the offset frequency value to the VFO frequency if it is covered in the setting range. The offset frequency is based on the setting of Auto Repeater B as above.

6.7 Record

The screenshot shows a menu with tabs: Vox, STE, FM, Power Save, Key Function, and Other. The 'Record' tab is selected and highlighted with a red box. Below the tabs, there are two settings: 'Record Function' set to 'On' and 'Record Delay' set to '0.0s'.

Set radio to records a Call Conversation

This feature will record the call conversation during transmitting and receiving a signal automatically.

Record Delay: Set the delay time before radio starts to record a call conversation.

6.8 Volume/Audio

The screenshot shows a menu with tabs: Alert Tone, Display, GPS/Ranging, VFO Scan, Auto repeater, Record, and Volume/Audio. The 'Volume/Audio' tab is selected and highlighted with a red box. Below the tabs, there are four settings: 'Maximum Volume' set to 'Indoors', 'Max Headphone Volume' set to 'Indoors', 'Mic Level' set to '3', and 'Enhanced Sound Quality' set to 'Outdoor'.

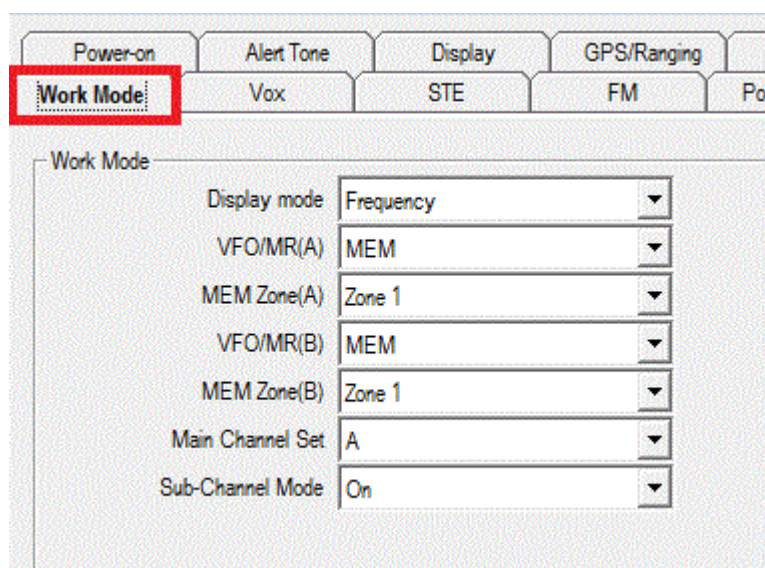
Maximum Volume

Set the volume level for speaker.

Indoors: Very low volume, suitable for the indoor use.

Level 1 – Level 8: There are 8 levels are selectable, and highest is level 8
Max Headphone Volume Set the volume level for external earphone. Indoors: Very low volume, suitable for the indoor use. Level 1 – Level 8: There are 8 levels are selectable, and highest is level 8
Mic Level Set the the volume level for microphone. Level 1 – Level 5: There are 5 levels are selectable, and highest is level 5
Enhanced Sound Quality These options are useful for reducing noise from microphone when radio transmits. Normal: Normal microphone operation MIC Enhancement: Enhances voice quality by noise reducing. Indoor: Very low volume, suitable for the indoor use. Outdoor: High volume, suitable for the outdoor use.

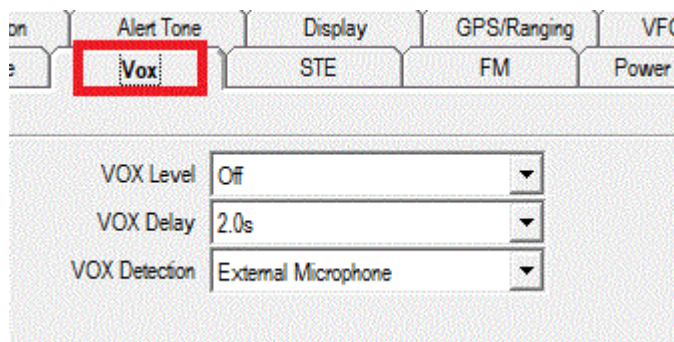
6.9 Work Mode



Display mode When radio works in the memory channel mode. Normally there are 2 ways to shows a channel on the screen, shows as channel name and show as frequency. Channel: Select to display the channel name on screen. Frequency: Select to display the frequency of channel on screen.
VFO/MR (A) Switch between VFO and memory channel mode display. Be noted that VFO only can be switched when radio display mode is set as frequency.
MEM Zone (A) Select zone from zone list to display channel A on the screen when radio is set as memory channel mode. To create the zone list go to Public→Zone.

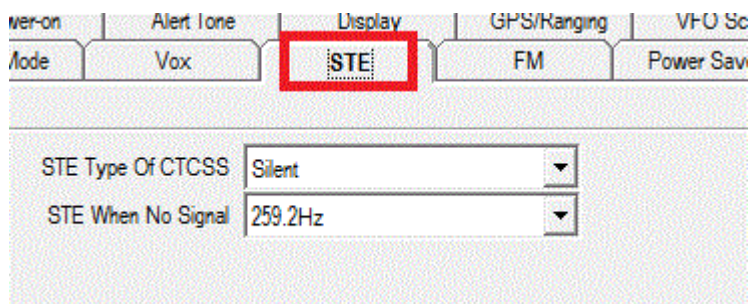
VFO/MR (B) Switch between VFO and memory channel mode display. Be noted that VFO only can be switched when radio display mode is set as frequency.
MEM Zone (B) Select zone from zone list to display channel B on the screen when radio is set as memory channel mode. To create the zone list go to Public→Zone.
Main Channel Set Set the channel A or channel B as the main channel to display on the screen. (Main channel is the channel is shown with bigger size)
Sub Channel Mode Set to display or hide the Sub-Channel on the screen

6.10 Vox



VOX Level Off: Turn off the VOX function Level 1 – 3: Select the sensitivity levels to activate the microphone with level 1 is lowest and level 3 is highest sensitivity.
VOX Delay 0.5S – 3S: Set the delay time before the VOX be starts to work.
VOX Detection Built-in Microphone: Select VOX works only with internal microphone of radio. Extenal Microphone: Select VOX works only with external optional microphone. Both: Select VOX works with both internal microphone and external microphone.

6.11 STE

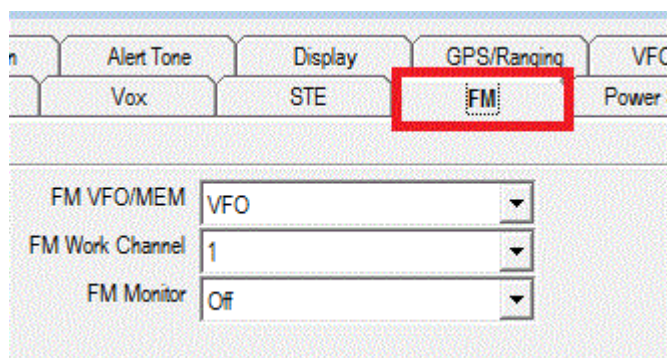


STE Type Of CTCSS (Squelch Tail Eliminate for simplex radio to radio only)
Select Off, Silent or a selected tone phase shift.

STE When No Signal

Select Off or 55.2 Hz or 259.2 Hz

6.12 FM



FM VFO/MEM

Switch VFO and memory channel mode for FM. To create the memory channel list go to Public → FM.

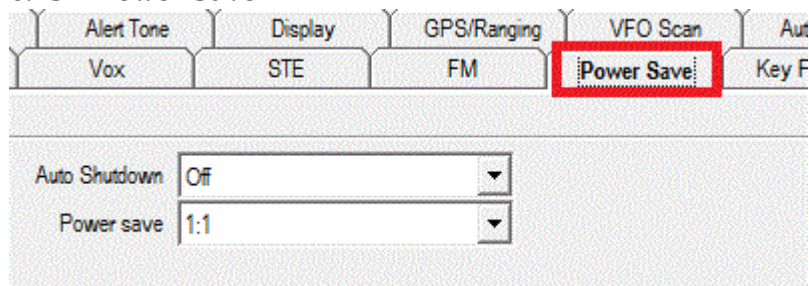
FM Work Channel

Select the channel from memory channel list will be displayed on the screen when FM is on.

FM Monitor

Select On :During FM radio is On, radio still allows to receive or transmit signal on the channel.

6.13 Power Save



Auto Shutdown

Set the timer to auto shutdown radio, during the duration of time if any key is pressed the timer will be reset and the shutdown duration time will be prolonged.

Power Save

Turn on to activate the power save function, to prolong the battery life.

1:1: Radio works 30ms, dormant 30ms.

2:1: Radio works 60ms, dormant 30ms

6.14 Key Function

Power-on	Alert Tone	Display	GPS/Ranging	VFO Scan	Auto repeater	Record	Volume/Audio
Work Mode	Vox	STE	FM	Power Save	Key Function	Other	Digital Fun

Key Function	
Key Lock	Manual
PF1 Short Key	Main Channel Switch
PF2 Short Key	Record Switch
PF1 Long Key	V/M
PF2 Long Key	Off
Long Key Time[s]	2
Knob Lock	Off
Keyboard Lock	Off
Side Key Lock	Off
Forced Lock Key	On

Key Lock

Manual: press and hold the  key to activate the key lock, when key lock is on the  (MENU) key is locked.

Auto: Radio will auto lock the keypad when standby for a while. Press  (MENU) key, then press the  key to unlock the keypad.

Press  (MENU) key, then press the  key to unlock the keypad.

PF1 Short Key

Assign the function for PF1 key, press the key to activate the function.

PF2 Short Key

Assign the function for PF2 key, press the key to activate the function.

PF1 Long Key

Assign the function for PF1 key, press and hold the key to activate the function. The time duration depends on the Long Key Time as you set.

PF2 Long Key

Assign the function for PF2 key, press and hold the key to activate the function. The time duration depends on the Long Key Time as you set.

Long Key Time

Set the time duration when press and hold the key to activate the long press key.

Knob Lock

When select On, after pressing and holding the  key to activate function the channel knob will be locked.

Select Off to turn off the function.

Keyboard Lock

When select On, after pressing and holding the  key to activate function the keypad will be locked except the  /  key.

Select Off to turn off the function.

Side Key Lock

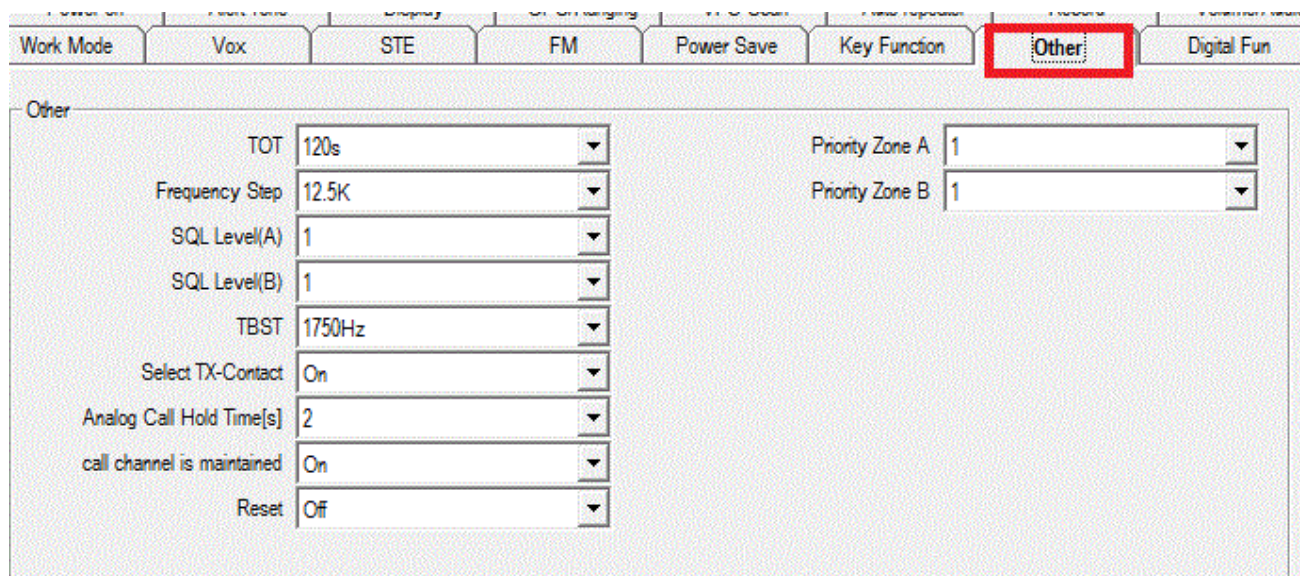
When select On, after pressing and holding the  key to activate function the side keys [PF1] and [PF2] will be locked.

Select Off to turn off the function.

Forced Lock Key

When select On, after pressing and holding the  key to activate function the  (MENU) key is locked.

Select Off to turn off the function.

6.15 Other


Setting	Value
TOT	120s
Frequency Step	12.5K
SQL Level(A)	1
SQL Level(B)	1
TBST	1750Hz
Select TX-Contact	On
Analog Call Hold Time[s]	2
call channel is maintained	On
Reset	Off
Priority Zone A	1
Priority Zone B	1

TOT

The Time-Out Timer (TOT) is the duration that the radio can continuously transmit before a transmission is automatically terminated.

Frequency Step

Selectable: 2.5K,5K,6.25K,10K,12.5K,20K,25K,30K,50K, a total of 9 frequency steps.

SQL Level (A)

Set the squelch level for the channel A.

SQL level (B)

Set the squelch level for the channel B.

TBST

Tone burst frequency is used to activate some dormant repeaters, 1000Hz, 1450Hz,1750Hz, 2100Hz a total of 4 options are offered. Press PTT and PF1 key together to transmit the tone burst.
Select TX-Contact When On, the radio DMR ID can be changed by input from keypad
Analog Call Hold Time Select how long a call is held for Analog reception.
Call Channel is Maintained Set to Off or On allows a transmit on the sub-channel B if done within 5 seconds after the call carrier was dropped
Reset Select On to allow the reset process on radio by pressing and holding [PF1] + PTT then turn the power knob to power on. Select Off to prohibit reset process on radio
Priority A Select Off or select which desired zone is set as priority zone
Priority B Select Off or select which desired zone is set as priority zone

6.16. Digital Fun

Optional Setting

Power-on | Alert Tone | Display | GPS/Ranging | VFO Scan | Auto repeater | Record | Volume/Audio

Work Mode | Vox | STE | FM | Power Save | Key Function | Other | **Digital Fun**

Digital Fun

Group Call Hold Time: 5s

Person Call Hold Time: 5s

Prewave Time: 100ms

Wake Head Period: 100ms

Filter Own ID In MissCall: On

Digital Remote Stun&Kill: Off

Digital Monitor: Single Slot

Digital Monitor CC: Any

Digital Monitor ID: Any

Monitor Slot Hold: On

Remote Monitor: Off

SMS Confirmation: Off

SMS Format: H-SMS

OK Cancel

Group Call Hold Time

1S – 30S: Select hang time for a Group Call

Person Call Hold Time

1S – 30S: Select hang time for a Private Call

Preware Time

0 mS – 1000 mS: Select the time to wake-up the radio from a power save

Wake Head Period

40 mS – 1200 mS: Select the time for the preamble – 200 mS recommended

Filter Own ID In Miss Call

Select Off or On then the radio will not remind of a miss call when receiving a call with same ID.

Digital Remote Stun & kill

On: Allow remote kill/ stun a radio. Be noted that both transmitter and receiver need to set On to use this function.

Digital Monitor

Select Off or Single Slot or Double Slot

Digital Monitor CC

Any: Allow to monitor any color code of an incoming signal.

Same: Allow to monitor only the color code that match to current setting of radio channel.

Digital Monitor ID

Any: Allows to monitor any talk group ID of an incoming signal.

Same: Allows to monitor only the group talk ID, which same as current setting of radio channel.

Monitor Slot Hold

Off: Turn off the slot hold

On: Turn on the slot hold

A recommend to turn on slot hold function when monitoring both time slots. When an incoming signal disappears and your radio is monitoring a time slot, instead of switching to monitor the other time slot, radio will hold on some seconds and wait untill incoming signal dissapears.

Remote Monitor

On: Activate the function.

Off: Turn Off the function.

Remote Monitor feature allows a remote user to activate a target radio's microphone and transmitter for a period of time. A call is silently set up on the target radio, and its PTT is controlled remotely without any indications given to the end user. The duration that the target radio transmits after receiving a Remote Monitor command is set in the target radio through the PC software. When receiving the Remote Monitor command, the target radio initiates a Private Call back to the originator of the Remote Monitor command.

SMS Confirmation

On: Allow an SMS to be confirmed when sent out.

Recommend On when sending SMS

SMS Format

There are 2 format types of a message. If the transmit radio is set as M-SMS/ H-SMS that require receiver radio must set as correspond M-SMS/H-SMS to receive message. (M-SMS is set as default setting)

M-SMS: Compatible to Motorola radio type.

H-SMS: Compatible to Hytera radio type.

7. Alarm Setting

The screenshot shows the 'Emergency Information' dialog box with two main sections: 'Analog Alarm' and 'Digital Alarm'. The 'Analog Alarm' section is marked with a red circle 1 and contains settings for Emergency Alarm (Alarm), ENI Type Select (5Tone), Emergency ID (1), Alarm Time[s] (10), Duration of TX[s] (10), Duration of RX[s] (10), Emergency ENI Send Select (Selected Channel), Emergency Channel (Analog), and Emergency Cycle (1). The 'Digital Alarm' section is marked with a red circle 2 and contains settings for Emergency Alarm (Alarm), Alarm Time[s] (10), Duration of TX[s] (10), Duration of RX[s] (10), Emergency ENI Send Select (Selected Channel), Emergency Channel (AllCall), Emergency Cycle (1), TG/DMR ID (12345678), Call Type (Group Call), and a checked 'Receive Alarm' checkbox. Below these is a 'Work Alone' section marked with a red circle 3, containing Response Time (1m), Warning Time (10s), and Response (Key). At the bottom are 'Man Down' settings with an unchecked checkbox, Man Down Delay[s] (0), and 'OK' and 'Cancel' buttons.

① Analog Emergency Alarm

Emergency Alarm

Alarm: Sounds alarm only

Transpond + Background: Radio sends a short warning sound and transmits to talk.

Transpond + Alarm: Radio sends the alarm sound.

Both: Radio sends the short warning sound and alarm sound.

ENI Type Select

Select from None, DTMF or 5Tone

Emergency ID

When ENI Type choose DTMF or 5Tone, you should edit the DTMF or 5Tone firstly, then choose the required number in this column

Alarm Time

Select after what time the alarm should be initiated

Duration Of TX

Select the duration of the Alarm transmission

Duration Of RX

Select the duration of listening mode after an alarm reset

Emergency ENI Send Select

Select which channel the Alarm should be sent out on

Emergency Channel

Select which channel to use

Emergency Cycle

Select Continuous or a time

② Digital Emergency Alarm

Emergency Alarm Alarm: Sounds alarm only Transpond + Background: Transmits to talk Transpond + No Local Alarm: Send a short warning sound Transpond + Local Alarm: Sends a a short warning sound and then send alarm sound
Alarm Time 1S – 255S: Select after what time to initiate the Alarm
Duration of TX Select the duration of the Alarm transmission
Duration Of RX Select the duration of listening mode after an alarm reset
Emergency ENI Send Select Assigned Channel: Select the channel in memory channel list to transmit alarm Selected Channel: Select the current channel to transmit alarm
Emergency Channel Select the channel to transmit alarm when Emergency ENI Send Select is selected as Assigned Channel
Emergency Cycle Select Continuous or a time
TG/DMR ID
Call Type Select the call type Private Call, Group Call, All Call

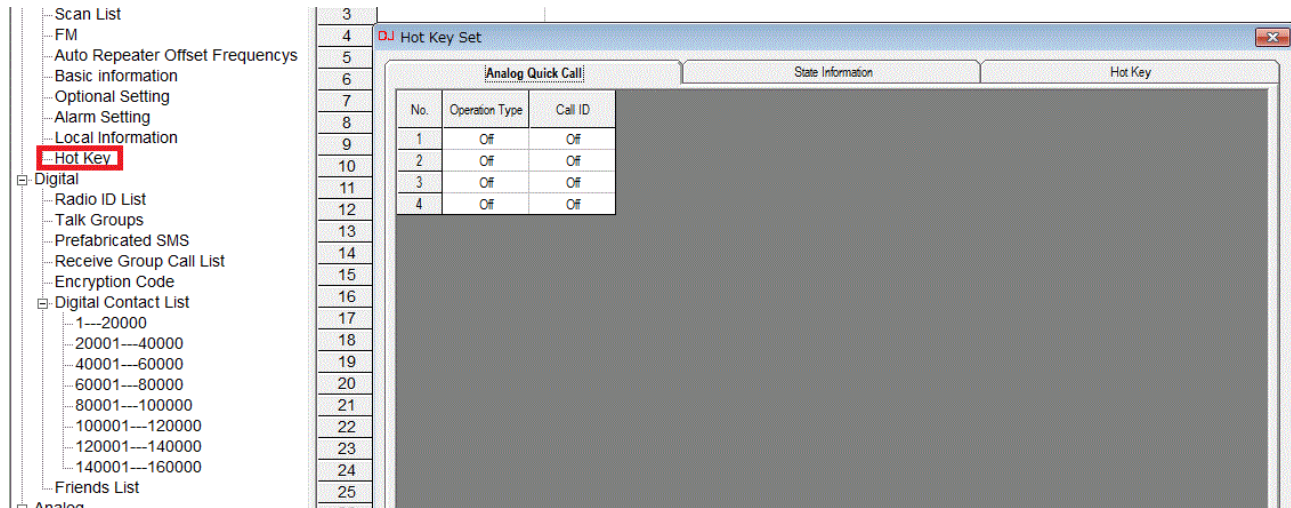
③ Work Alone

Response Time Select the time for the radio to respond to an Alarm trigger
Warning Time Select the duration for a warning transmission
Response Select Key or Voice for a response to reset
Man Down Select Man down to turn on the function, when turn mandown On the radio will start alarm if the radio is falling to the ground or put the radio at the horizontal. Raise the radio to stop the alarm. Man Down Delay: Set the delay time that man down will be delay before starts to work.

8. Local Information

Connect radio to PC by a cable, then click to Local Information it will shows radio's information.

9. Hot Key



Analog Quick Call

The Call ID refer to the DTMF, 2Tone or 5 Tone set up under separate menu

State Information

Allows text messages to be entered and made available for digital calls and can be selected when using Hot Key's functions

Hot Key

To assign a function for the key on keypad.

Call	Analog	Should edit the analog quick call first, then choose analog in the hot key set. Press the key to transmit 2Tone/5Tone/DTMF to start the analog quick call.
	Digital	It allows to select a contact from the digital contact list, press the key to switch the channel to the contact temporary. It will switch back to the original contact after the group/personal call hold time.
	SMS	Quick access to Messages in the menu
	New Msg	Quick access to New Msg in the Menu - Messages
	Quick Text	Quick access to Quick Text in the Menu - Messages
	Inbox	Quick access to Inbox in the Menu - Messages
	Outbox	Quick access to Out box in the Menu - Messages
	Contact list	Quick access to Contact list in the Menu - Contacts

Menu	Manual dial	Quick access to Manual Dial in the Menu - Contacts
	Call Log	Quick access to Call Log in the Menu
	Sent Calls	Quick access to Dialed Calls in the Menu - Call Log
	Answered Calls	Quick access to Answered Calls in the Menu - Call Log
	Missed Calls	Quick access to Missed Calls in the Menu - Call Log
	Zone	Quick access to Zone in the Menu
	Radio set	Quick access to Radio Set in the Menu - Settings

II : Digital

1. Radio ID List

No.	Radio ID	Name
1	12345678	My Radio
2	8765432	Radio 2
3		
4		
5		
6		
7		
8		

Radio allows to create multiple DMR Radio ID. It allows to edit and select an ID for the channel, each channel is allowed to select one ID.

2. Talk Groups

TG/DMR ID	Call Alert	Name	Call Type
1	None	Group	Group Call
16777215	None	ALL	All Call
30	None	Private	Private Call

Create the Group call, Private call and All call.

Private call: TD/DMR ID is the ID of a target radio need to be saved.

Group call: All member in the group need to set the same Group ID on the same channel.

All call: When set All Call the default ID is 16777215, all radios are set as All Call can communicate to each other.

3. Prefabricated SMS

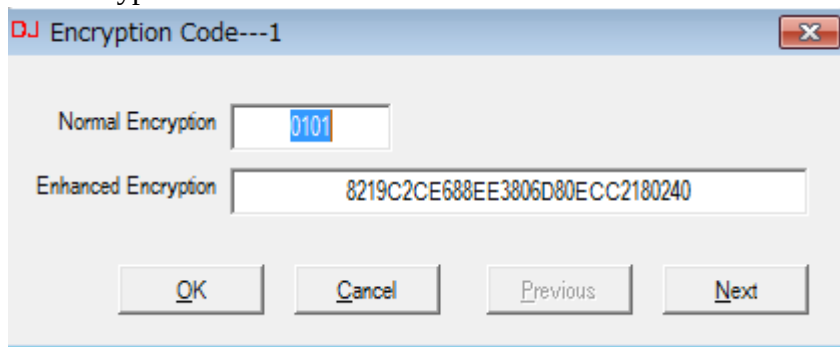
Text
Hello!
Welcome!
Thank you!
Good bye!
Happy every day!

Create SMS messages then store it into radio, this is convenience when you want to send the pre-stored messages.

4. Receive Group Call List

Make a receiving group list call.

5. Encryption Code



With the digital encryption, the communication will be secured and safe. Only the radios have set same encryption code can communicate to each other. A total of 32 digital encryptions is offered, and it can be programmed in the PC software or defined in the Menu setting.

6. Digital Contact List

This console for creating the digital contact list.

Name: Input the name of contact.

Call Type: Select the call type.

TG/DMR ID: Input the ID

Call Alert: Select the type of notification when receive a call alert

The Digital Contact list also can be generated by importing/Export the CSV format.

Go to Tool→ Import→ Digital Contact List and import the CSV file with format content like this.

	A	B	C	D	E	F	G	H	I	J
1	No.	Radio ID	Callsign	Name	City	State	Country	Remarks	Call Type	Call Alert
2	1	10	ABC	Contact 1	City Name	State Name	Country Name	Remarks	Private Call	None
3	2	11	ABC	Contact 1	City Name	State Name	Country Name	Remarks	Private Call	None
4										
5										

After the file is imported, the Digital Contact Will be shown in PC software interface.

No.	TG/DMR ID	Call Alert	Name	City	Call Type	Repeater Number	State/Prov
1	10	None	Contact 1	City Name	Private Call	ABC	State Name
2	11	None	Contact 1	City Name	Private Call	ABC	State Name
3							
4							
5							

[illegible]

III: Analog

32

The screenshot shows a dialog box titled "Analog Address Book Edit---1". It has a standard Windows-style title bar with a red close button. The dialog contains two text input fields. The first field is labeled "Number" and contains the text "12345". The second field is labeled "Name" and contains the text "Contact1". Below these fields are four buttons arranged in a 2x2 grid: "Previous", "Next", "OK", and "Cancel". The "Previous" and "Next" buttons have underlined letters 'P' and 'N' respectively, suggesting keyboard shortcuts. The "OK" and "Cancel" buttons have underlined letters 'O' and 'C' respectively.

The radio allows a set of addresses for the Analog mode. Open the Analog Address Book and click on the first line to open the Analog Address Book Edit window. the Call ID reference the DTMF or 5Tone number programmed under its menu.

2. 5Tone Setting

1

Self ID

12345

Decode Standard

ZVEI1

Decoding Response

Beep Tone

Time Of Decode Tone[ms]

70

Preamble[ms]

10

Auto Reset Time[s]

10.0

Time-Lapse After Encode[ms]

200

PTT ID Pause Time[s]

Off

First Delay[ms]

200

Stop Code

F

Stop Time[ms]

0

2

Information ID NO.

1

Information Code Function1

Function Option

Squelch Off

Decoding Response

None

Information ID

Function Name

Decode Time[ms]

200

First Delay Time After Stop[ms]

500

☒ Side Tone

NO.	Special Call	Encode ID	Encode Standard	Time Of Encode Tone[ms]	Name
1		12345	ZVEI1	70	
2			ZVEI1	70	
3			ZVEI1	70	
4			ZVEI1	70	
5			ZVEI1	70	
6			ZVEI1	70	
7			ZVEI1	70	
8			ZVEI1	70	
9			ZVEI1	70	
10			ZVEI1	70	
11			ZVEI1	70	

Special Call

Ok

Cancel

PTT ID Starting(BOT)

Encode ID

ZVEI1

70

Special Call

PTT ID Ending(EOT)

Encode ID

ZVEI1

70

Special Call

ZVEI1

TONE FREQ(Hz)

0 2400

1 1060

2 1160

3 1270

4 1400

5 1530

6 1670

7 1830

8 2000

9 2200

A 2800

B 810

C 970

D 885

E 2600

F 680

LENGTH(ms) 70

GROUP TONE A

REPEAT TONE E

①

Set 5Tone is an “optional signal” for the the current analog channel by using PC software. Set “call” is a function of a programmed key. To set go to Public➔ Channel➔Analog.

Press the programed key to transmit the selected 5Tone to a target radio. When squelch is opened at the receiver side press [PTT] to talk.

Self ID: Input the desired ID

Decode Standard: Select the desired decode standard

Decoding Response: Select None or Beep Tone or Beep Tone & Respond when the receiver`s tone is decoded.

Time Of Decode Tone: 30mS – 100 mS

PreTime: 10mS – 2550mS

Auto Reset Time: 0S – 25S Set the time to reset 5Tone after squelch is opened.

Time-Lapse After Encode: 10mS – 2550mS

PTT ID Pause Time: Off or 5S -75S

First Delay: 10mS – 2550mS

Stop Code: Off or B, C, D, F

Stop Time: 0mS – 2550mS

②

Information ID No: 1 - 16

Function Option: Squelch Off, Call All, Emergency Alarm, Remotely Kill, Remotely Stun, Remotely Stun, Remotely Wake Up, Group Call.

Decoding Response: Beep Tone, Beep Tone & Respond

Information ID: Input the Information ID

3. 2Tone Setting

Encode

1st Tone Duration[s] 0.5

2nd Tone Duration[s] 0.5

Long Tone Duration[s] 1.0

Gap Time[ms] 1000

Auto Reset Time[s] 10.0

☒ Side Tone

NO.	1st Tone Frequency[Hz]	2nd Tone Frequency[Hz]	Name
1	300.0	400.0	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

Ok Cancel

Set 2Tone is an “optional signal” for the the current analog channel by using PC software. Set “call” is a function of a programmed key. To set go to Public → Channel → Analog.

Press the programed key to transmit the selected 2Tone to a target radio. When squelch is opened at the receiver side press [PTT] to talk.

1st Tone Duration: 0.5S – 10S

2nd Tone Duration: 0.5S – 10S

Long Tone Duration: 0.5S – 10S

Gap Time: 0S – 2000S

Auto Reset Time: 0S – 25S

Go to Decode to set the decode tone.

Decode

NO.	1st Tone Frequency[Hz]	2nd Tone Frequency[Hz]	Decoding Response	Name
1	300.0	400.0	Beep Tone	
2				
3				

Ok Cancel

Set the 1st decode Tone Frequency and 2nd decode Tone Frequency.

Decoding Response

None: No notification when tone is decoded.

Beep tone: Radio sounds beep when tone is decoded.

Beep Tone and Respond: Radio sound beep and sends a notification to the receiver when tone is decoded.

4. DTMF Setting

DTMF Transmitting Time 50 Millisecond

DTMF Self ID 134

DTMF Interval Character A

Group Code B

Decoding Response Beep Tone

First Digit Time[ms] 200

Pretime[ms] 500

Auto Reset Time[s] 10.0

Time-Lapse After Encode[ms] 200

PTT ID Pause Time[s] Off

D Code Pause Off

☒ Side Tone

☒ PTT ID

PTT ID Starting(BOT) 1234

PTT ID Ending(EOT)

Remotely Kill 33

Remotely Stun 44

DTMF Encode

M1	123
M2	
M3	
M4	
M5	
M6	
M7	
M8	
M9	
M10	
M11	
M12	
M13	
M14	
M15	
M16	

Please Input 0~9,A,B,C,D,*,#

Special Call(S)

OK Cancel

To set DTMF as an optional signal for the current analog channel, go to Public → Channel → Analog.

Press and hold the PTT key to transmit the DTMF ID to a target radio. When squelch is opened at the receiver side you can talk into the microphone to start a conversation.

DTMF Transmitting Time: 50mS – 500mS

DTMF Self ID: Set the ID

DTMF Interval Character: Select A, B, C, D, *, #

Group Code: Select Off or A, B, C, D, *, #

Decoding Response: None, Beep Tone, Beep Tone & Respond

First Digit Time: 0S – 2500S

Pre-time: 10S – 2500S

Auto Reset Time: 0S – 25S

Time-Lapse After Encode: 10mS – 2500mS

PTT ID Pause Time: Select Off or 5S – 10S

D Code Pause: Select Off Or 10S -16S

Side Tone:

PTT ID:

PTT ID Starting (BOT):

PTT ID Ending (EOT):

Remotely Kill: Set the number to kill a target radio. Press and hold PTT to transmit then press keypad to input the kill number. To revive the radio use PC software to read data from radio, it will automatically revived.

Remotely Stun: Set the number to revive a target radio. Press and hold PTT to transmit then press keypad to input the stun number. When a radio is activated stun on you can not do anything on the radio, the radio only can receive signal and sounds voice at speaker. To turn off the stun function on radio use PC software to read data from radio, stun will be turned off.