

Ailunce HD1 Software Manual

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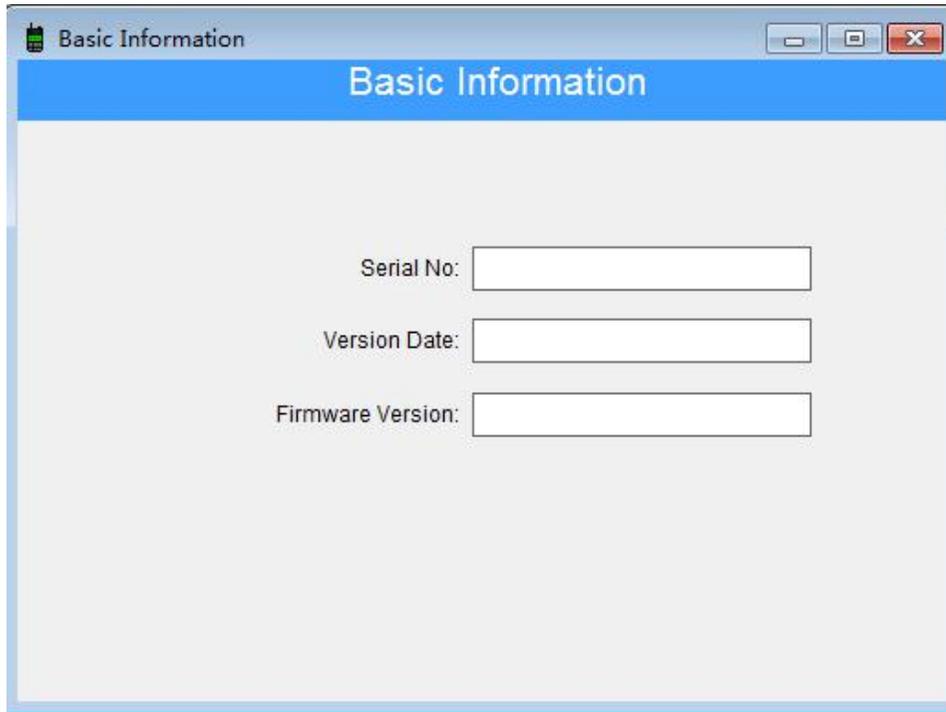
Youtube: https://www.youtube.com/channel/UCGyspET2YR_z0Ruczm-S54g

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Basic Setting:

Basic information



The screenshot shows a window titled "Basic Information" with a blue header bar. Below the header, there are three input fields arranged vertically. The first field is labeled "Serial No:" and is empty. The second field is labeled "Version Date:" and is empty. The third field is labeled "Firmware Version:" and is empty. The window has standard Windows-style window controls (minimize, maximize, close) in the top right corner.

Serial No. - S/N number

Version Date - Date of manufacture

Firmware Version - Current firmware version

*Note: All the information can be read from the radio,
but no changes can be made.*

Setting

Password Setting:

Password Setting	
Enable Write Password: <input type="checkbox"/>	Enable Read Password: <input type="checkbox"/>
Write Password: <input type="text" value="000000"/>	Read Password: <input type="text" value="000000"/>

Enable Write Password -

This parameter allows users to enable or disable the CPS write lock. Users will need to enter the correct CPS write password before writing.

Write Password -

This parameter allows users to set the write password with a maximum of six number. 000000-999999.

Note: This parameter will be available only when CPS Enable Write Password is checked.

Enable Read Password - Checked means enable password.

Read Password - Set the password value.

Note: when you forget the password, please contact the seller.

Basic Attributes:

Basic Attributes	
KeyPress Voice-assist:	ON
Keypress Voice Language:	ENGLISH
Squelch Level:	4
Repeater Connect	2
A/B Scan Time in Dual Band(s):	5
Battery Powersave Mode:	1: 4
Wakeup Speed From Powersave:	Fast
Priv/Group Call Response	OFF
Lone Worker Response Time(m):	1
Lone Worker Pre-Alarm(s):	1
Default Zone Band A:	No Zone
Default Zone Band B:	No Zone
Noise Tail Elimination Mode:	Reverse Code
Noise Tail Elimination:	<input checked="" type="checkbox"/>
Keylock at Power-on:	<input type="checkbox"/>
Auto Keylock After 15sec:	<input type="checkbox"/>
Key Beep Tones:	<input checked="" type="checkbox"/>
Roger Beep:	<input type="checkbox"/>
Dual Watch Band A/B(BDR):	<input type="checkbox"/>
Accept Radio Kill Cmd:	<input type="checkbox"/>
Accept Radio Wakeup Cmd:	<input type="checkbox"/>
Talk Permit Tone(Digital):	<input type="checkbox"/>
Talk Permit Tone(Analogue):	<input type="checkbox"/>
No RX Info when Operating Menu:	<input checked="" type="checkbox"/>
RX Info Display Time(s):	1

KeyPress Voice-assist - OFF: There will be no voice broadcast when operate the radio.

ON: There will be voice broadcast when operate the radio.

KeyPress Voice Language - Select voice broadcast Chinese or English.

Squelch Level - 0-9 levels. To assure receiving completely, select squelch at a low level under weak signal. But the lower the level, the stronger the received invalid interference.

Repeater Connect - Repeater automatic connect times. The number indicates the times radio automatic transmitting when not connect repeater successful after press PTT.

Note: When you can't connect the repeater, try to set a higher value.

A/B Scan Time in Dual Band(s) - The switch time between A band & B band. After B band receive, how long does it takes before A band start receiving.

Battery Powersave Mode - Enabling this feature causes an idle radio to enter Battery Saver mode automatically if no carrier is detected or transmission is made within a certain period.

Battery saving rate higher users select, the more power saved.

Wakeup Speed From Powersave -

The speed of Radio decoding the receiving signal in battery save mode.

Priv/Group Call Response -

It is digital channel transmission contact selection.

Off: Launch with the set of contacts when launching.

1-10s: If the current channel has received the call within this time range, it will be transmitted with the received contact. If the set time is not transmitted or is received, it is transmitted with the set contact.

Note: This option is only valid for digital mode.

Lone Worker Response Time(m) -

When there is no any operations within the set time, the radio will automatically alarms and sounds.

Lone Worker Pre-Alarm(s) -

When there is no any operations within the Lone Worker Response Time, the radio will automatically alarms and sounds. Lone Worker Pre-Alarm time indicates the the duration of the alarm sound.

Default Zone Band A - The Band A default zone when users turn on the radio.

Default Zone Band B - The Band B default zone when users turn on the radio.

Noise Tail Elimination Mode - Two options. The default option is Reverse Code. Basically all of the tail sounds can be eliminated by Reverse Code. Very few radios may be needed to use 54.7Hz. 54.7Hz is just one more option, it's rarely used.

Note: This parameter will be available only when CPS Noise Tail Elimination is checked.

Noise Tail Elimination - Checked means turn on the Noise Tail Elimination.

Keylock at power-on - The radio keypad default is locked when users turn on the radio.

Auto Keylock After 15sec - Radio keypad will be locked automatically if without any operation for about 15s.

Key Beep Tones - Checked, when users press the radio key there will be sound.

Unchecked, there is no sound when users press the radio key.

Roger Beep - Transmit ends prompt voice switch

Dual Watch Band A/B(BDR) - Checked, Radio will default dual band.

Accept Radio Kill Cmd - Checked, indicate the radio accept other radio remote kill command.

Unchecked, the radio will never be remote kill.

Accept Radio Wakeup Cmd -

Checked, indicate the radio accept other radio remote wakeup command.

Unchecked, the radio will never be remote wakeup.

Talk Permit Tone(Digital) - Checked, turn on the Talk Permit Tone in Digital mode. When users press PTT, there will be a sound. Unchecked, there will be no sound when press PTT.

Talk Permit Tone(Analogue) - Checked, turn no the Talk Permit Tone in analog mode. When users press PTT, there will be a sound. Unchecked, there will be no sound when press PTT

No RX info when Operating Menu - Checked, when users are operating the radio menu, there will be no receiving information display to Interrupt the operation. When the radio on home page, there will be normal caller's information display. Unchecked, no matter what users are doing, when there is signal, the radio will show caller's information.

RX info Display Time(s) - After the signal end, how long the receive information will keep display.

Display

Display	
Active Band At Power-On:	A Frequency
BackLight Time(s):	5
Power-on Password:	<input type="checkbox"/> 000000

Active Band At Power-ON -

The default Band when users turn on the radio. The other band will display date and time.

Note: It only available when the radio default signal Band.

Backlight Time(s) -

1-120, Screen Background will turn off automatically if there is no operations within the setting time.

Countless: Screen lights on forever.

Power-on Password -

Checked, when you turn on the radio, You need to write the right password.

Note: If users want to initialize the radio, please unchecked it first. When users check it, the radio won't allow users initialize the radio.

Mic Setting

Mic Setting	
VOX Delay Time: 0.5s	Press PTT to cancel VOX: <input type="checkbox"/>
Mic Gain: 0	Insert Headset Activates VOX: <input type="checkbox"/>

VOX Delay Time -

VOX delay time, 0.5~5s

Mic Gain -

-10~10, Microphone sensitivity. Higher and more sensitive.

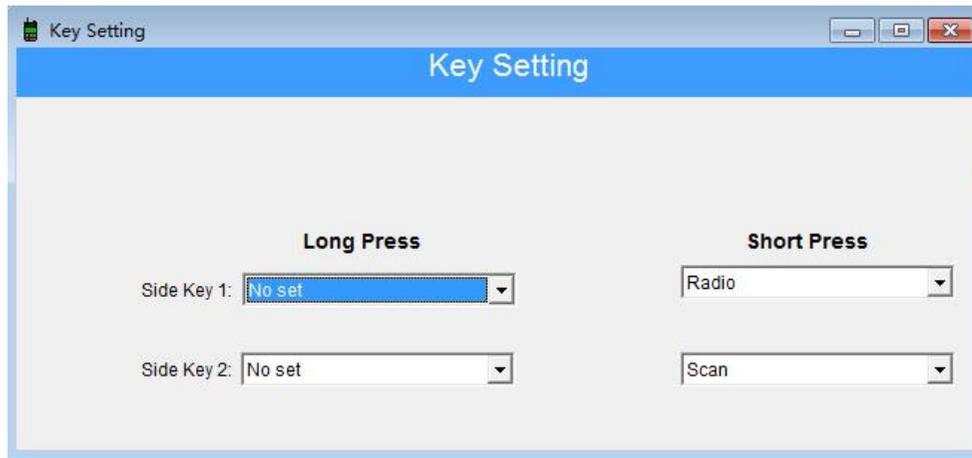
Note: When other people feedback your radio voice is low, you can adjust it to a higher value, and speak closer to the radio mic. The best distance is 5-10cm.

Press PTT to Cancel VOX -

Checked, when you press PTT, the VOX will auto off.

Insert headset Activates VOX -

Checked, when you insert headset, the radio VOX function will auto on.



Key Setting

No Set - the side key no function.

High/Mid/Low power switch - Press to switch the radio power

Scan - Turn on/off the scan

Radio - Turn on/off the FM broadcast

Wake Up - Transmit command to remote wake up other radios.

Repeater/Talkaround - Press to switch repeater & talkaround.

Transceive Inhabit - Transmit command to remote kill other radios.

1000Hz, 1450Hz, 1750Hz, 2100Hz - Single tone signalling

Zone Minus - Press to switch last zone

Promiscuous - Turn on/off promiscuous

Ch-Mode - Switch channel mode, frequency, channel, name.

VOX - Turn on/off VOX

Analog Monitor - Turn on/off analog monitor

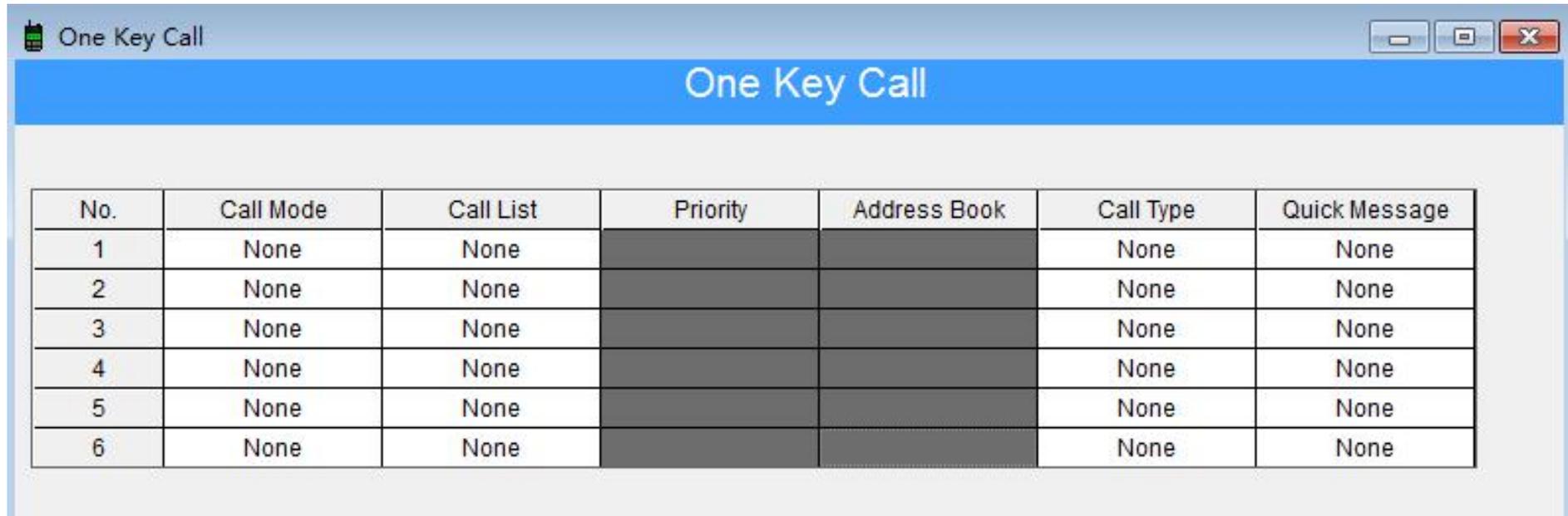
Zone Plus - Press to switch next zone

DMR Slot - Switch slot 1 and slot 2

Manu Dial - One key to enter into manual dial page.

One key 1 ~ 6 - Custom function

One Key Call



No.	Call Mode	Call List	Priority	Address Book	Call Type	Quick Message
1	None	None			None	None
2	None	None			None	None
3	None	None			None	None
4	None	None			None	None
5	None	None			None	None
6	None	None			None	None

One key Call

This feature provides you with shortcut to make calls or quick menu access. By pressing a programmed One Touch Call/Menu key, you can make a call or send a message to the predefined contact, or access the predefined menu directly.

To use the function properly, set the following information.

Call Mode:

This option allows you to view all available call modes.

None: Disables the One Touch Call function.

Digital: Enables the One Touch Call function in digital mode.

Note: When this option is set to None, Call List, Call Type and Quick Text will be unavailable.

Call List:

This option allows you to view all available contacts or shortcuts list.

Call Type:

This option allows you to set Call or message.

Quick Message:

This option allows you select the message you have set

Note: Only the one key message you have set, quick message will be available.

No.	One Key Message
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

One Key Message:

Users are allowed to pre-edit 50 quick notes at most. Each note should have less than 100 characters, including letters, numbers, space and other symbols. Users can access Quick Notes through Messages menu.

No.	Radio ID	Radio Name
1	1234	radio-1
2	2345	radio-2
3	3456	radio-3
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		

Radio ID

The radio supports to save 32 IDs.

When you setting the channels you can select the ID you want to use based on the actual situation.

Note: The CPS default radio ID in channels is the first one. So users don't worry that you need to select it every time. Put the the most commonly used on the first one.

And when you want to use another radio ID in one channel and you select the one you want.

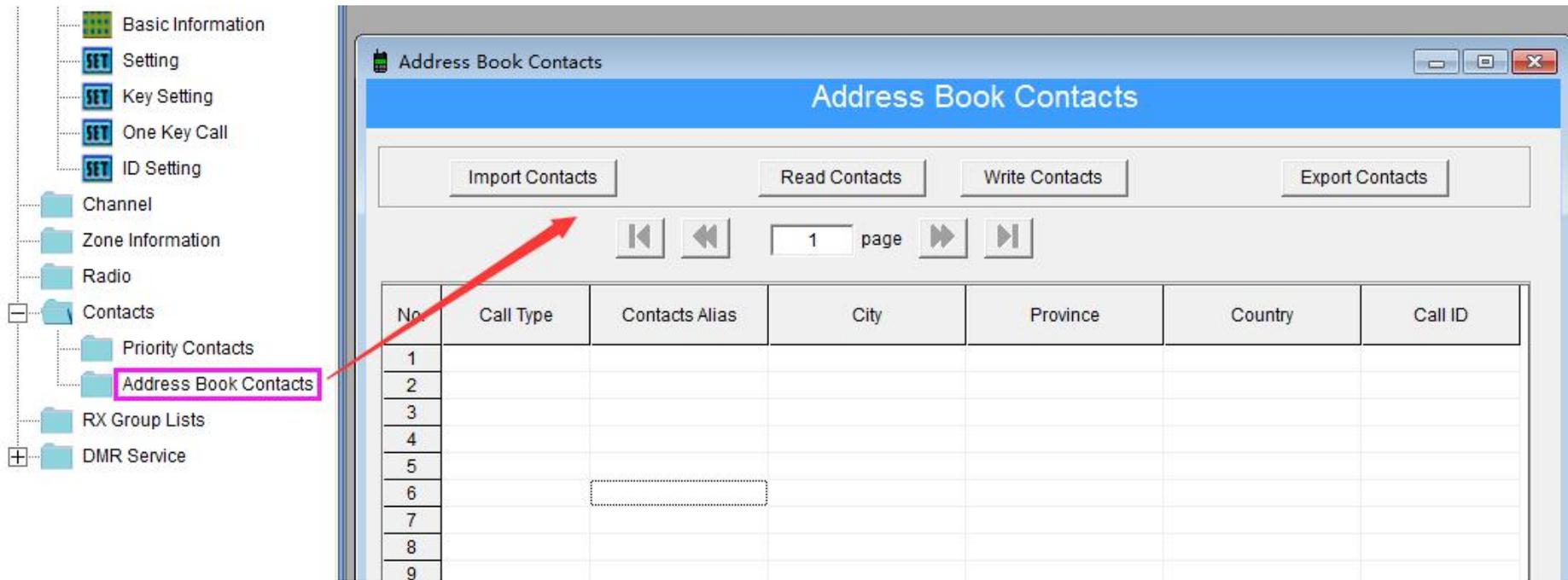
Contact

The screenshot displays a software interface with a tree view on the left and a main window titled 'Priority Contacts' on the right. The tree view includes folders such as 'Basic Setting', 'Channel', 'Zone Information', 'Radio', 'Contacts', 'Address Book Contacts', 'RX Group Lists', and 'DMR Service'. The 'Contacts' folder is expanded, showing 'Priority Contacts' and 'Address Book Contacts'. The 'Priority Contacts' folder is highlighted with a pink box, and a red arrow points from it to the 'Priority Contacts' window. The window has a blue header and contains a table with columns: No., Call Type, Contacts Alias, City, Province, Country, and Call ID. The table has four rows of data. Above the table are buttons for 'Import Contacts' and 'Export Contacts'.

No.	Call Type	Contacts Alias	City	Province	Country	Call ID
1	Group Call	CALL1				1234
2	Private Call	CALL2				2345
3	Group Call	CALL3				3456
4	All Call	CALL4				

Priority Contacts -

It supports to save 1000 contacts. Supports to edit, add, delete, sort, import, export on the CPS. The most important is priority contacts supports to add, edit, delete contacts via radio keypad.



Address Book Contacts -

It supports to save 100000 contacts, Supports to import and export by .CSV file. But don't allows edit on the CPS and radio.

Click the Import Contacts first, after you have import the contact data to the CPS, you can click the Write Contacts and write the contacts to the radio.

If you want to read the contacts from the radio, you can click the Read Contacts. If you need to export the contacts, you can click the Export Contacts.

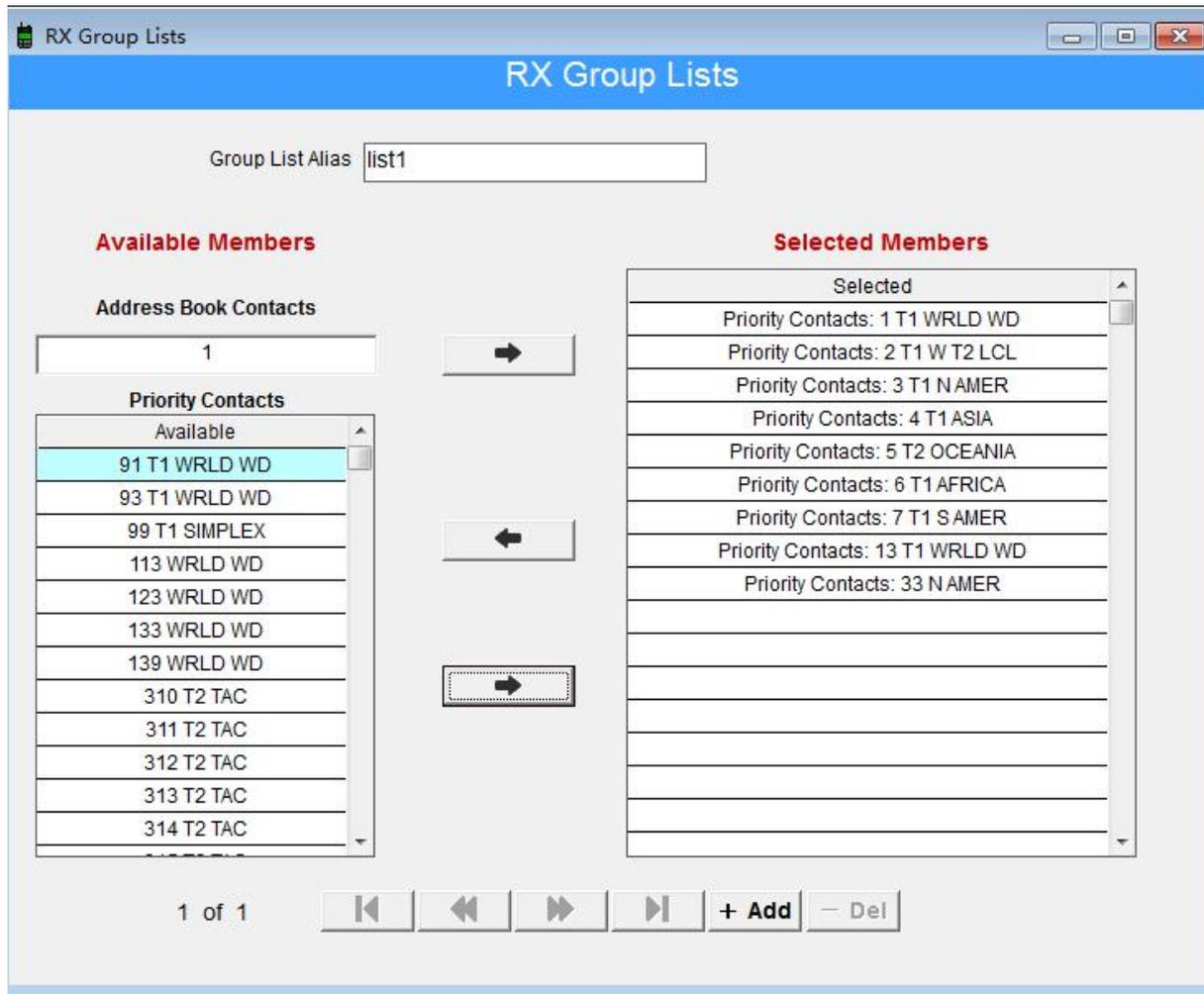
Note: The address book contacts is independent of the codeplug. When you write or read radio codeplug, it won't effect the address book contacts. If you want to change it, you need to write and read it alone in CPS contacts.

For the address book contacts don't allow edit on the radio keypad, so it mainly used to store private call contacts.

And it will let the radio show caller's information when there is a signal.

Contacts download:

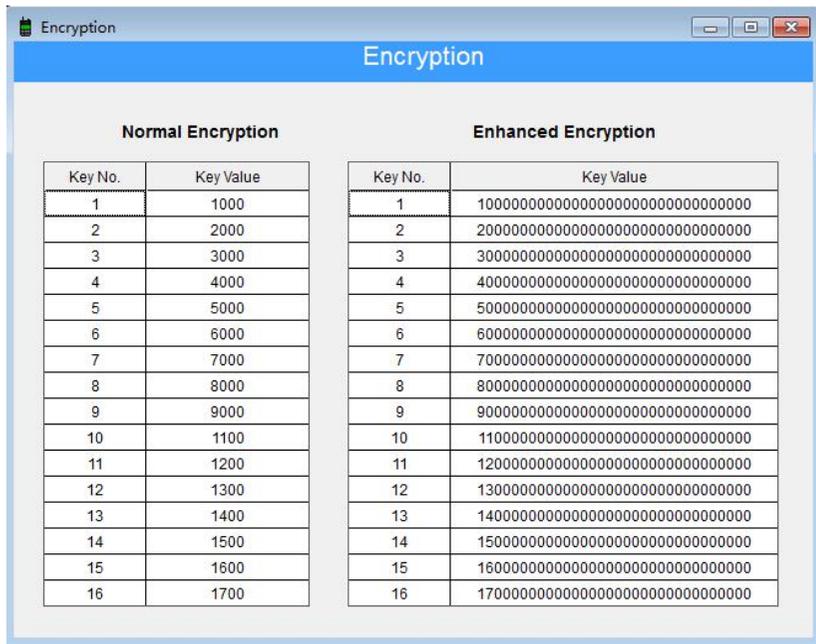
<http://www.amateurradio.digital/wizard.php?radio=hd1&force=yes>



RX Group Lists

The radio supports save 254 RX group lists.

Users can customize the group name and put some contacts into one receive group list.



Encryption - Users are allowed to encrypt the radio. It is not perfectly reliable, but just to prevent eavesdropping. Only in the same encryption type and the same key value, can the radio encode the transmitting signal and decode the encrypted call.

Normal encryption - Users are allowed to pre-edit 16 groups at most. Encryption length allows you enter 4 bytes, includes numbers and characters. If the encryption type of the two

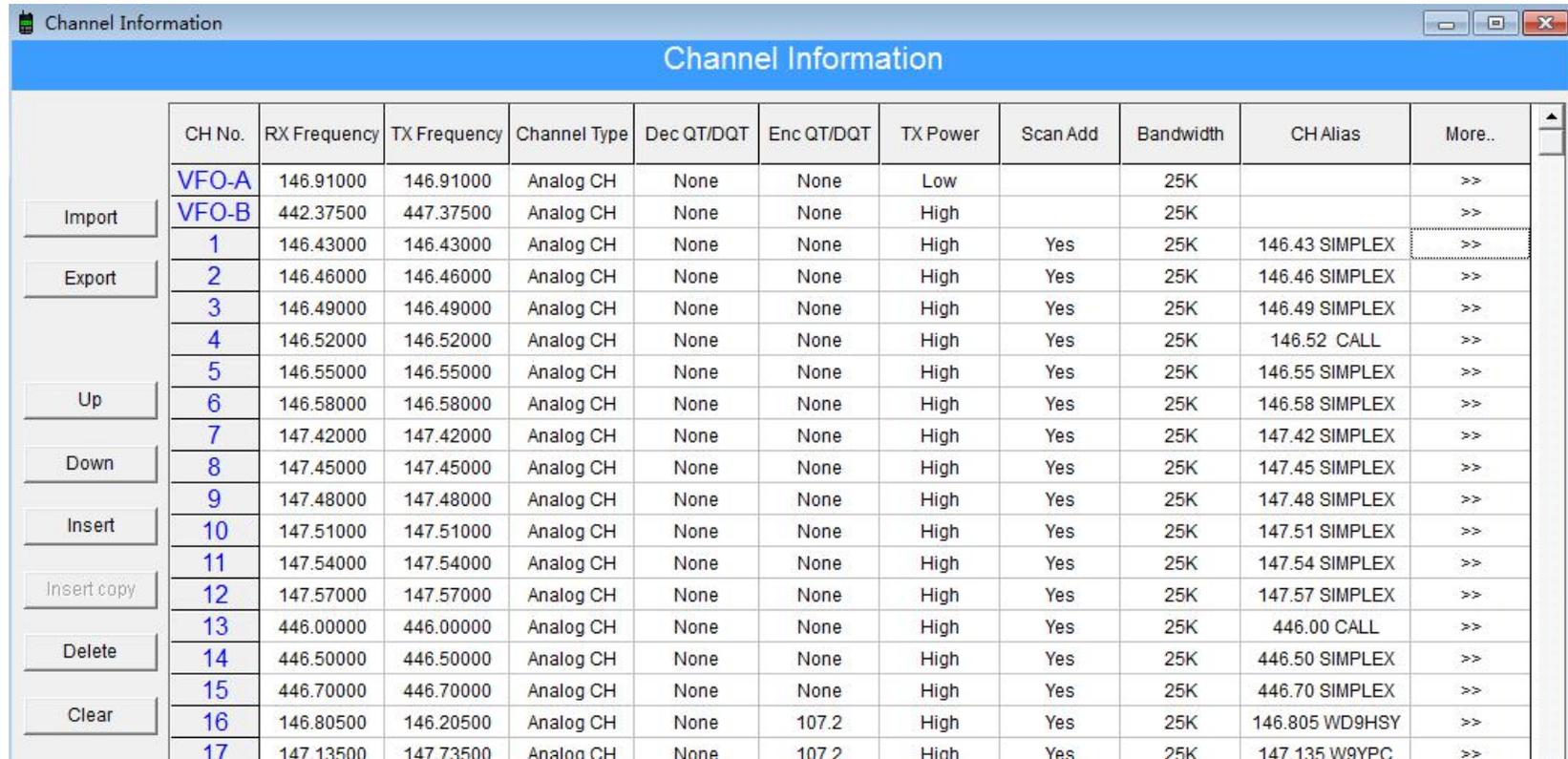
radios is different, the voice heard will be unclear.

Enhanced encryption - Users are allowed to pre-edit 16 groups at most. Encryption length allows you enter 32 bytes, includes numbers and characters. If the encryption type of the two radios is different, the voice heard will be unclear or no voice will be heard at all.

Note: This option is only valid for digital mode. Please obey the local law.

Channel

The radio supports to save 3000 channels. It supports import, export, up, down, insert, clear, delete.



The screenshot shows a software window titled "Channel Information" with a blue header. Below the header is a table with 12 columns: CH No., RX Frequency, TX Frequency, Channel Type, Dec QT/DQT, Enc QT/DQT, TX Power, Scan Add, Bandwidth, CH Alias, and More.. To the left of the table is a vertical column of control buttons: Import, Export, Up, Down, Insert, Insert copy, Delete, and Clear. The table contains 17 rows of channel data, including VFO-A, VFO-B, and numbered channels 1 through 17. Each row has a corresponding button in the left column and a ">>" button in the "More.." column.

	CH No.	RX Frequency	TX Frequency	Channel Type	Dec QT/DQT	Enc QT/DQT	TX Power	Scan Add	Bandwidth	CH Alias	More..
Import	VFO-A	146.91000	146.91000	Analog CH	None	None	Low		25K		>>
	VFO-B	442.37500	447.37500	Analog CH	None	None	High		25K		>>
	1	146.43000	146.43000	Analog CH	None	None	High	Yes	25K	146.43 SIMPLEX	>>
Export	2	146.46000	146.46000	Analog CH	None	None	High	Yes	25K	146.46 SIMPLEX	>>
	3	146.49000	146.49000	Analog CH	None	None	High	Yes	25K	146.49 SIMPLEX	>>
	4	146.52000	146.52000	Analog CH	None	None	High	Yes	25K	146.52 CALL	>>
Up	5	146.55000	146.55000	Analog CH	None	None	High	Yes	25K	146.55 SIMPLEX	>>
	6	146.58000	146.58000	Analog CH	None	None	High	Yes	25K	146.58 SIMPLEX	>>
Down	7	147.42000	147.42000	Analog CH	None	None	High	Yes	25K	147.42 SIMPLEX	>>
	8	147.45000	147.45000	Analog CH	None	None	High	Yes	25K	147.45 SIMPLEX	>>
	9	147.48000	147.48000	Analog CH	None	None	High	Yes	25K	147.48 SIMPLEX	>>
Insert	10	147.51000	147.51000	Analog CH	None	None	High	Yes	25K	147.51 SIMPLEX	>>
	11	147.54000	147.54000	Analog CH	None	None	High	Yes	25K	147.54 SIMPLEX	>>
Insert copy	12	147.57000	147.57000	Analog CH	None	None	High	Yes	25K	147.57 SIMPLEX	>>
	13	446.00000	446.00000	Analog CH	None	None	High	Yes	25K	446.00 CALL	>>
Delete	14	446.50000	446.50000	Analog CH	None	None	High	Yes	25K	446.50 SIMPLEX	>>
	15	446.70000	446.70000	Analog CH	None	None	High	Yes	25K	446.70 SIMPLEX	>>
Clear	16	146.80500	146.20500	Analog CH	None	107.2	High	Yes	25K	146.805 WD9HSY	>>
	17	147.13500	147.73500	Analog CH	None	107.2	High	Yes	25K	147.135 W9YPC	>>

VFO-A, VFO-B, it is frequency mode. The values is the default settings when you turn on the radio. You can edit them on the radio. Click >> to open the detailed channel setting.

Digital/Analog Data

Channel Type:	<input type="text" value="Digital CH"/>	Channel Alias:	<input type="text" value="146.43 SIMPLE"/>
TX Power:	<input type="text" value="High"/>	RX Frequency:	<input type="text" value="146.43000"/>
Time Out Timer(s):	<input type="text" value="180"/>	TX Frequency:	<input type="text" value="146.43000"/>
VOX Level:	<input type="text" value="1"/>	VOX:	<input type="checkbox"/>
Scan Add:	<input checked="" type="checkbox"/>	Default to Talkaround:	<input type="checkbox"/>
Channel Work Alone:	<input type="checkbox"/>		

Channel Type - Analog and Digital

TX Power - 3 levels, high 10/8w, Middle 3.5w, Low 1w.

Time out Timer(s) - The longest time you can transmit once you press the PTT.

VOX level - higher more sensitive, (Only workable when the VOX is turned on)

Scan Add - Checked means add it to scan list. *(Note: The radio scan as zone list, no real scan list. When we select one zone, it will scan the channel which checked the Scan Add. HD1 has all channels(no zone), when we check all channels, It will scan all the channels, even we don't check the scan add.)*

Channel work alone - Check means turn on the work alone.

Channel Alias - Edit the channel name. RX Frequency - Receive frequency TX Frequency - Transmit frequency

VOX - checked means turn on the VOX in the channel.

Default to Talkaround - Checked it means it is simplex mode. Even you have set the offset, only check it, your transmit frequency is same as receive frequency.

Digital Data

Work Mode:	Simplex	RX Group Lists:	list1
Slot:	Slot1	Encryption:	<input type="checkbox"/>
ID Setting:	N9KGH	Encryption Type:	Normal Moc
Colour Code:	0	Encryption Key:	1
TX Authority:	Prohibit TX	Promiscuous:	<input type="checkbox"/>
Kill Code:	None	Contacts:	None
WakeUp Code:	None		

Digital Data

Here can be edited only when you select the digital in the channel type.

Work Mode - Simplex, Repeater, Double Slot means DCDM, it makes time slot work in simplex

mode.it support two conversations on the same channel in simple mode.

Slot - Time Slot

ID Setting - Select one ID you have saved

Color Code - 0-15 for choice.

TX Authority - Prohibit TX, Always, Color Code, Channel free

Kill Code - None or select the contact you want to remote kill

WakeUp Code - None or select the contact you want to remote wakeup.

RX Group List - you can choose the list you have saved, or you can choose Custom. They have same function. When you choose the custom, you need to edit the RX Group List in the channel below. In fact the Custom use less when you programming the radio on CPS. It is very useful when you programming the radio via radio keypad.

Encryption - Checked means turn on the encryption

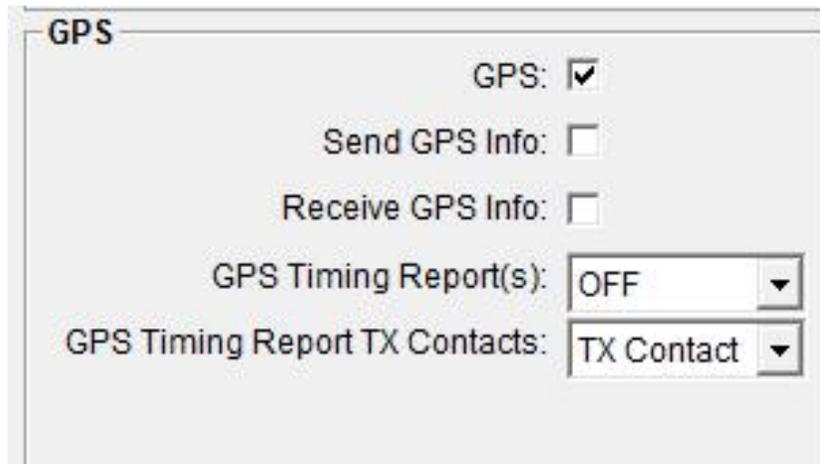
Encryption Type - Select Normal mode or Enhanced mode

Encryption Key - Select the Encryption number you want to use

Promiscuous - Checked will allows the radio to pick up activity on any active talk group as long as you have the frequency and colour code in the channel.

Contacts - Select the priority or address book first, then select the Specific contact.

GPS



The screenshot shows a window titled "GPS" with the following settings:

- GPS:
- Send GPS Info:
- Receive GPS Info:
- GPS Timing Report(s): OFF (dropdown menu)
- GPS Timing Report TX Contacts: TX Contact (dropdown menu)

GPS - open the GPS function.

Send GPS info - Send the GPS to another radio after you press the PTT.

Receive GPS info - your radio allows receive the other radio's GPS information.

GPS timing report - How long you radio send GPS info to another radio.

GPS Timing Report TX Contacts - The contact that the GPS information send to

Analog Data

Bandwidth: 25K ▼

Dec QT/DQT: None ▼

Enc QT/DQT: None ▼

TX Authority: Allow TX ▼

Relay:

Analog Data

Here can be edited only when you select the analog in the channel type.

Bandwidth - 25K and 12.5K are selectable

Dec QT/DQT - It means receive CTCSS/DCS, only when you don't want to receive non CTCSS/DCS or different CTCSS/DCS signals, you can set it. Dec QT/DQT will help you filter some signals. If you want to listen more voice, You don't need to set it, just keep it as none.

Enc QT/DQT - It means transmit CTCSS/DCS.

TX Authority - Allows TX, Channel Free, Prohibit TX

Relay - Checked it to make sure the channel is repeater mode.



Channel Work Alone:

Digital Data

Work Mode: Simplex
 Slot: Slot1
 ID Setting: N9KGH
 Colour Code: 0
 TX Authority: Prohibit TX
 Kill Code: None
 WakeUp Code: None

RX Group Lists: Custom
 Encryption: list1
 Encryption Type: Normal Mod
 Encryption Key: 1
 Promiscuous:
 Contacts: None

GPS

GPS:
 Send GPS Info:
 Receive GPS Info:
 GPS Timing Report(s): OFF
 GPS Timing Report TX Contacts: TX Contact

RX Group Lists

Available Members

Address Book Contacts

Priority Contacts

91 T1 WRLD WD
93 T1 WRLD WD
99 T1 SIMPLEX
113 WRLD WD
123 WRLD WD
133 WRLD WD
139 WRLD WD
310 T2 TAC
311 T2 TAC
312 T2 TAC

Selected Members

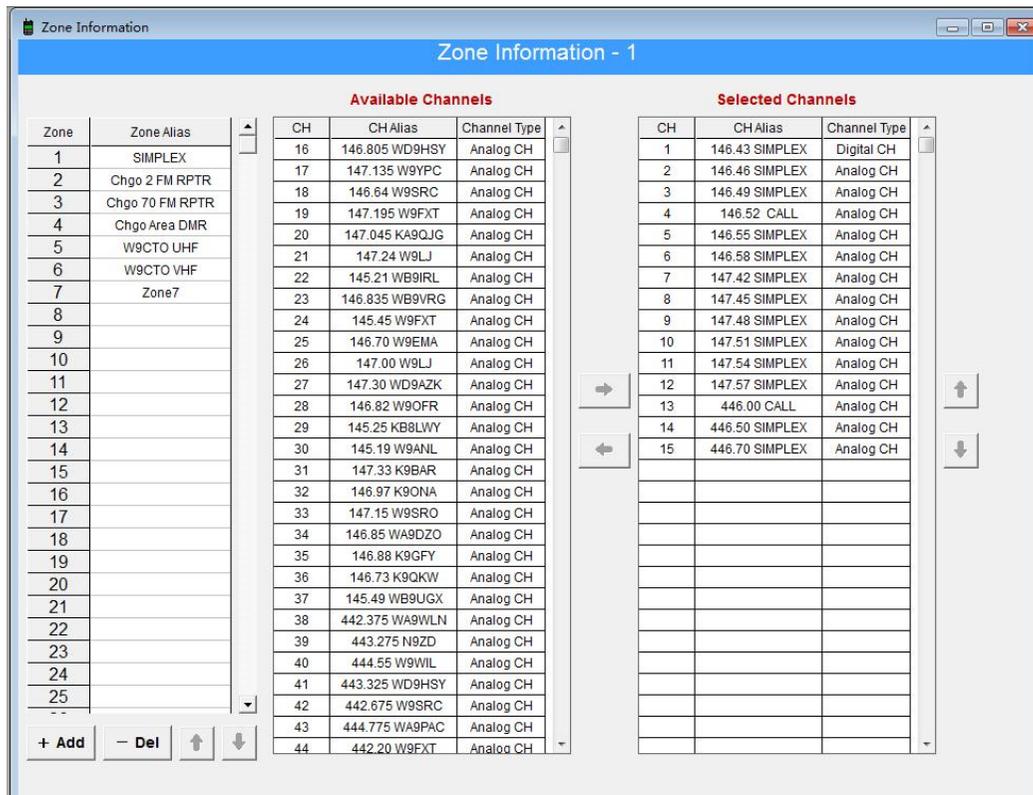
Selected

Priority Contacts: 1 T1 WRLD WD
Priority Contacts: 2 T1 W T2 LCL
Priority Contacts: 3 T1 NAMER
Priority Contacts: 4 T1 ASIA
Priority Contacts: 5 T2 OCEANIA
Priority Contacts: 6 T1 AFRICA
Priority Contacts: 7 T1 SAMER
Priority Contacts: 13 T1 WRLD WD
Priority Contacts: 33 NAMER

Channel Information - 1

Navigation: [Home] [Left] [Right] [End] [Add] [Del]

Note: Only when you select the Custom, the below RX Group Lists is available. We seldom use this place. It mainly for the FPP(Front Panel Programming).



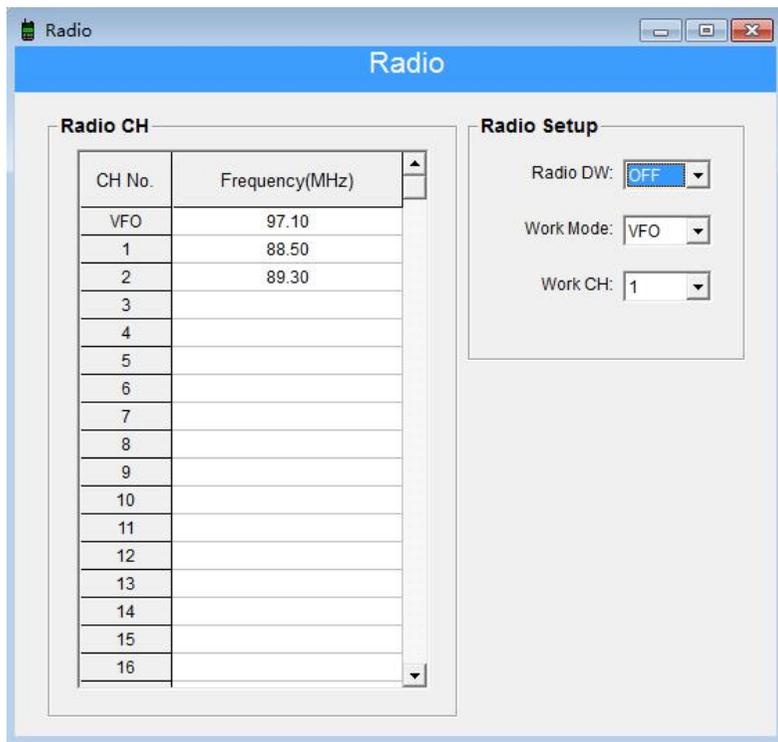
Zone Information

This option allows users to organize channels conveniently. Supports save 256 zones. Every zone supports up to 64 channels. If more than one zone is programmed into the radio, the user can change the zone via menu. The zone support up and down the sorting.

Zone Alias - The Zone alias allows the user to define a unique name for each Zone. The maximum length is 16 characters.

Available Channels - The table displays the available channels for you to add into a zone. Available channels are related to the channels in the radio.

Selected Channels - The table displays existing channels in the current zone.



FM broadcast. The frequency is 76-107.95MHz(Receive only).

Radio Channel -

Total 32 memory channels. Users can write every channel frequency directly.

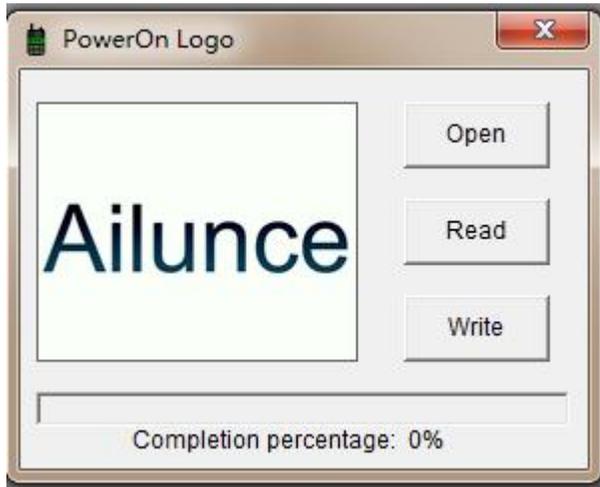
Radio Setup -

Radio DW, "ON" indicates that listening to FM broadcast while receiving signals, "OFF" indicates that listening to FM broadcast while stop receiving signals. Most times we may choose "ON", because we don't want to miss any voice signals from the other

side of the radio.

Work Mode - VFO is frequency mode, CH is channel mode. It is the default mode when you enter the FM broadcast.

Work CH - The default channel when you enter into the FM broadcast channel mode.



Power On Logo

Set up a unique power on picture -

Make a photo you want to display when turn on radio.

Size:160*128

Bit depth:24

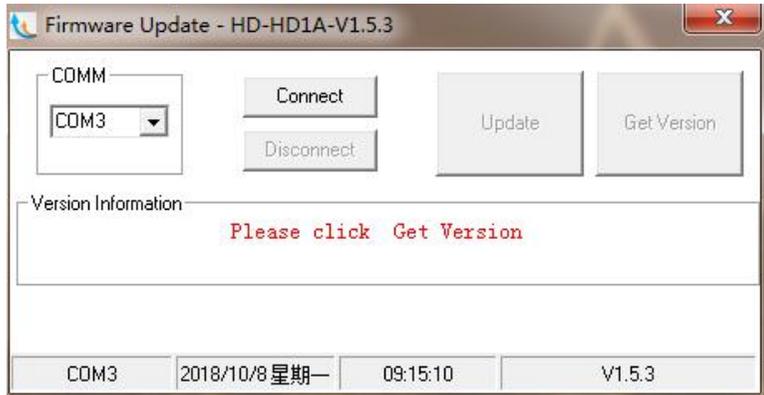
Form:BMP

Left top of the software, **Function >> Power On Logo >> Open >> Write**

Restore the original pictures -

Open the software, Left top of the software, **Function >> Power On Logo >> Write**. No need to click the Open. The original picture is build in the software.

Upgrade the Firmware



Step1:Download the newest firmware and install it.

Step2:Connect the radio and computer with programming cable.

Step3:Press PTT and Side key 1, turn on the radio at same time.

Make sure the radio enter into DFU mode.

Step4:Open the firmware,check the **COM** first.

Step5:Click the **Connect**

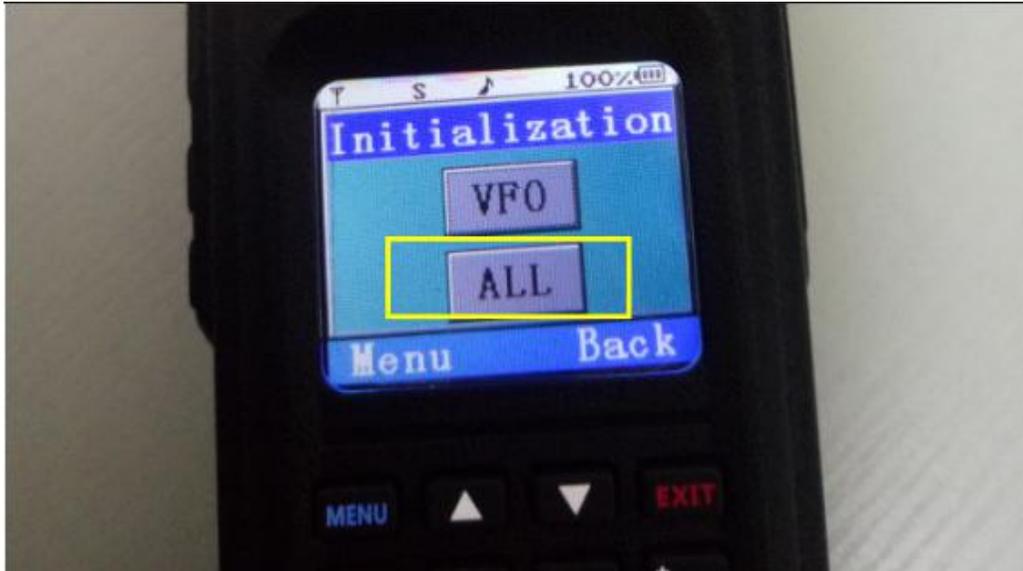
Step6:Click **Get Version** (If it always prompt error, you can skip this step)

Step7:Click **Update**

Step8:Click **Disconnect**

Note: When it prompt can't connect, please check the COM and the driver. Sometimes the new firmware improves lots of functions or adds some new functions. After upgrading the firmware, you need to initialize your HD1 to make sure all the data is compatible.

Initialize the radio



Press the MENU and EXIT, turn on the radio at the same time, then select ALL to start to initialize.

Note: Initialize the radio is equivalent to restoring factory settings. So before you initialize the radio, you can save the codeplug first.