



D668 SERIES OWNER'S MANUAL

STOCK CODE: 834963

www.samhoo-pmr.com



Preface

Thanks for your favor in our product. To derive optimum performance from the product , please read this manual carefully before using it.

This manual applies to the following models of D668 series:
D668 U1、 D668 U2、 D668 V digital portable products.

User Information

- ◆ Government law prohibits governmental jurisdiction within the scope of unauthorized use of radio.
- ◆ Illegal operation will be subject to fines or arrest punishment.
- ◆ Repair only by trained professional and technical personnel.

Security: Users need to know and understand the use of radio.

 **Note:** The pictures presented in this manual are only for reference !



Note

Please observe the following precautions to prevent fire, personal injury and damage to the radio.

- ◆ Continuous using radio long time or at high power transmit mode will cause the heat of the back of terminal.
- ◆ In any case, do not dismantling the unit. Do not let the terminal by prolonged direct sunlight, and do not use the radio near the heating device.
- ◆ Do not put the radio on extremely dusty, damp and splashing water areas, and also on the uneven surface.
- ◆ If you find any unusual smells or smoke from terminal, you should immediately remove the battery, and contact with the local Samhoo dealer.

Instructional Icon

The following icons are available through this manual:

-  Caution: Indicates situations that could cause damage to your radio.
-  Note: Indicates tips that can help you make better use of your radio.
- * Asterisk: Indicates the currently restricted function.

Term Explanation

Key operation

Short press: To press the key and release it quickly;

Long press: To press the key and remain holding it down about a period of 1.5 seconds;

Hold down: To press the key and remain holding it down.

Group call

Group call is initiated by a single user to a group. involving the calling party and all the group members.

Emergency call

Emergency call is the highest priority call. It is used to call for help to the companion or the control center in an emergency situation. The general set is group call form. If initiating an emergency call, any non emergency calls can be interrupted.

Conventional mode

Under conventional mode, Simplex communication can be carried out directly between the terminals without network limitation. But user cannot use the functions that need network support.

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Disclaimer




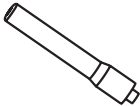





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Checking Items In The Package

Please unpack carefully and check that all items listed below are received. if any item is missing or damaged, please contact your dealer.

		
Battery(B02207400)	Charger(DC100002)	Power adapter(CG-120100)
		
Antenna(AntD618H1)	Belt clip(SBC01)	Strap(SR000)
		
Radio unit	Ower's manual	Certificate

-  Note : 1.The frequency band of antenna is marked on the label of it, if not, please refer to the label on the radio unit for frequency band information;
2. The pictures presented in this manual are only for reference !

Optional Accessories



C-Earset with on-mic PTT (EA0303)



Programming cable (SPC03)

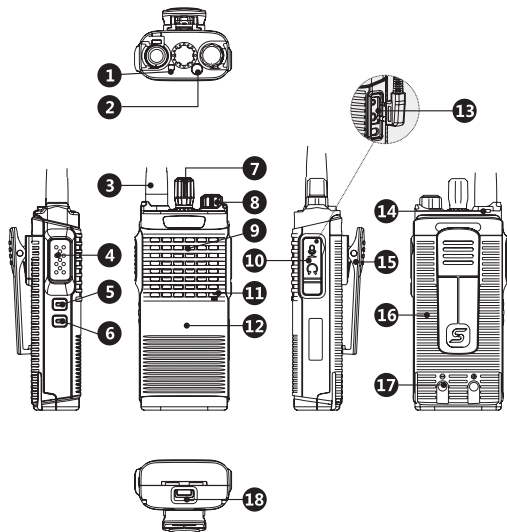


Note:

If you need to know more information about the optional accessories, please contact us.

Product Overview

Product controls



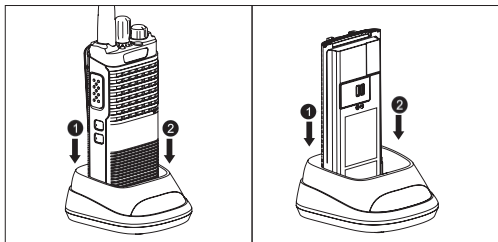
NO.	Part Name	NO.	Part Name
1	LED Indicator	2	Emergency Call Key
3	Antenna	4	PTT Key (transmit key)
5	P1 key (hot key)	6	P2 key (hot key)
7	Channel Knob	8	Radio ON-OFF/Volume
9	Speaker	10	Accessory Jack Cover
11	Microphone	12	Dot Matrix Display
13	Accessory Jack	14	Strap Hole
15	Belt Clip	16	Battery
17	Battery Pole Piece	18	Battery Latch

Before Use

Charging the battery

■ Charging operation steps

Please only use the charger and battery specified by Samhoo; the indicator of the charger can show the charging progress.



1. As ① shown, connect the power adapter to AC power socket and the jack at the back of the charger.
2. As ② shown, insert the battery or the radio with battery into the charger, and make sure the contact between the battery and charger is good.
3. The charging process initiates when the indicator glows red.
4. When the indicator turns green, it indicates that the charging is finished.

The charging time for the standard 2000 mAh battery normally takes about 3 hours, for optimal battery performance, the first charging time should be up to 5 hours.

■ Charger LED indicator and charging status

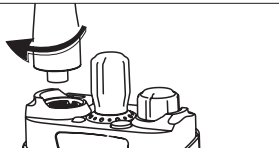
LED indication	Charging status
LED flashes red and green alternatively	Standby(not loaded)
LED glows red	Charging status
LED glows green	Fully charged

Assembly and Disassembly

Attaching the antenna

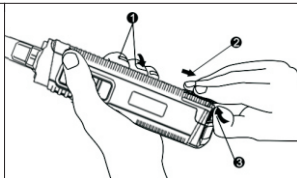
1. Rotate the antenna clockwise until it is fastened.

Note: To remove the antenna, please rotate it counter-clockwise.



Removing the battery

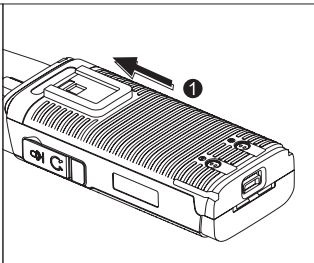
1. As **1** shown, hold the radio like this.
2. As **2** shown, push up the battery latch with another hand.
3. Yank the battery as arrow direction shows in **3**.



Attaching the battery

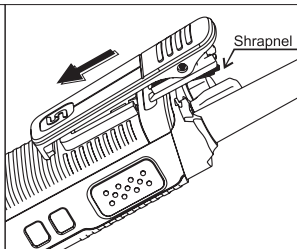
1. Put the battery flatwise into the radio, as shown in **1**, horizontally push the battery latch to the top along the aluminum slot until a clickety-clack sound is heard.

Note: If the battery is not fastened or is still loose, please remove the battery and reinstall.



Attaching the belt clip

1. As shown in the picture, push down the belt clip along the slot.
2. If it is required to disassemble the belt clip, push the belt clip shrapnel upwards and pull it out.



Assembly and Disassembly

Attaching audio accessory/programming cable

- 1.As shown in the picture, open the dust plug.
- 2.Align the audio/programming cable plug with the accessory jack.
- 3.Insert the audio/programming cable plug.



Status Indicators

LED indicators

The LED indicator on top provides you with the information of the current operation status of the radio.

Handheld terminal status	Indicator status
Transmitting the call	LED glows red
Receiving the call	LED glows green
Channel is idle	LED flashes green slowly
Channel is busy	LED glows orange

Status Indication

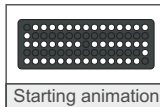
LED icons

Dot matrix display could show multiple kinds of information. During the process of switching on the radio, it would show the start animation; after switching on it, press [P1] or [P2], it could show the channel serial number, signal strength scale, clock, Bluetooth, squelch level and battery scale periodically; rotate [On-Off/ Volume] knob it could show volume scale; rotate [Channel] knob you could switch the channel.

Basic Operations

Turning on/off the radio

In order to turn on the radio, please rotate the [On-Off/ Volume] knob clockwise until a clickety-clack sound is heard; during the process, the dot matrix screen will show the start animation.



In order to turn off the radio, please rotate the [On-Off/ Volume] knob counter-clockwise until a clickety-clack sound is heard.

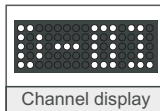
Adjusting the volume

After turning on the radio, rotate the [On-Off / Volume] knob clockwise to increase the volume or counter-clockwise to decrease the volume.



Selecting a channel

After switching on the radio, the dot matrix display shows the channel serial number by default; rotate the [Channel] Knob to switch a channel. Meanwhile, there is a voice broadcast indicating the current channel serial number, the signal serial number icon also changes accordingly. This radio could save up to 99 channels.



[A] Direct Mode, Analog Channel [AR] Repeater Mode, Analog Channel
[D] Direct Mode, Digital Channel [DR] Repeater Mode, Digital Channel

Basic Operations

Signal Intensity *

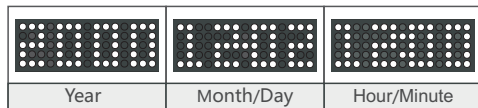
LED screen can indicate 5 levels of signal intensity and unregistered status.



Press **【P1】** key or **【P2】** key can switch to signal intensity interface to check signal levels.

Clock *

Display: Clock display includes “year; month/date; hour/minute”. Short press **【P1】** key or **【P2】** key continuously can display clock information in a circle.



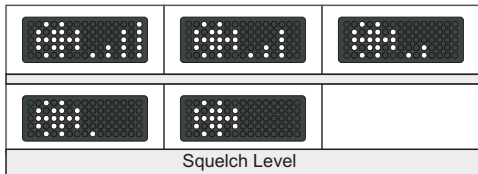
Setup

In year, month/date or hour/minute interface, long press **【P1】** key can enter edit interface, the first digit will flicker. Short press **【P2】** key can adjust value, short press **【P1】** key can switch to next digit. Long press **【P1】** key can save data and exit edit interface, long press **【P2】** key can quit saving data and exit edit interface.

Basic Operations

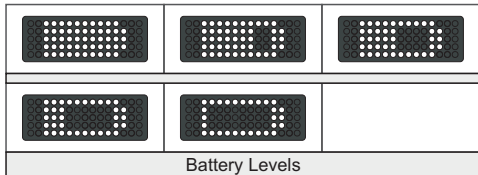
Squelch Level *

LED screen can indicate 5 squelch levels. Press **【P1】** key or **【P2】** key continuously can switch to squelch level interface to check signal intensities.



Battery Levels

LED screen can indicate 5 battery levels.



Mode Switch

The radio support analogue conventional/digital conventional modes. Modes can be switched via programming software by dealers.

-  Note:
Stands for limited functionality, indicating that this feature.

Call

Group call

Talk group can be set by dealer in advance. The operation methods are the same under DMO/conventional mode.

• Transmitting a group call

- 1: Rotate channel knob to select call group;
- 2: Press 【PPT】 key can transmit a group call;

• Receiving and replying a group call

You can receive the group call without any key operation. If reply is needed, please press 【PPT】 key after the speech of the other side and then speak to microphone.

Emergency Call

Emergency call is supported and operated as below:

Long press 【Emergency Call】 key to transmit an emergency call.

Troubleshooting

Phenomena	Analysis
The radio cannot be turned on	Please check whether the voltage is too low or the battery is damaged.
Call failure	1: Check the signal intensity; make sure that the radio is in the service area. 2: Contact network administrator, make sure that the radio is authorized.
Group call receive /reply failure	1: Make sure that the radio is in the correct group channel. 2: Make sure that the radio is authorized to join the group.
Call transmission is terminated	Long transmission time, time is out.
Call drop accidentally	1: Check whether the terminal is in basement, tunnel or other signal shielding position beyond the coverage area. 2: Check the battery.
Loudspeaker diminished	1: Check if there is water in loudspeaker's inlet hole. 2: If there is water, put loudspeaker downwards to palm and pat it for few times. After 3~5minutes, the loudspeaker will be back to normal.

If above troubleshooting suggestions cannot solve your problem, or you are facing other problems beyond those, please do not hesitate to contact with local Samhoo dealers or contact Samhoo directly for more assist.

Care and Cleaning

To guarantee optimal performance as well as a long service life of your radio, please follow the tips below.

Radio care

Keep the radio far away from substances that can corrode the electronic circuit.

Do not hold the radio by its antenna or headset cable directly to prevent damage to its normal use.

Attach the accessory jack cover when the radio is not in use.

Radio cleaning

Clean up the dust and fine particles on the radio surface and charging piece with a clean and dry lint-free cloth or a brush regularly.

Use neutral cleanser and a non-woven fabric to clean the keys, control knobs and front case after long-time use. Do not use chemical preparations such as stain removers, alcohol, sprays or oil preparations, so as to avoid surface case damage. Make sure that the radio is completely dry before use.

Note:

Turn off the radio and remove the battery before cleaning.

Quality Assurance and Maintenance Terms

SHENZHEN SAMHOO SCI & TECH CO.,LTD. (hereinafter referred to as Samhoo) promise the radios produced by Samhoo, since the date of purchase, under the condition of normal use, operation and maintenance, have defects in the material or manufacturing technology, you will enjoy the following warranty service.

1. The scope and duration of warranty

The radio: 12 months.

The standard accessories (including antenna, battery, charger, belt clip etc.): 6 months.

2 The warranty

If you apply for the warranty services of Samhoo products, please provide a valid warranty card or the original invoice. In the warranty period, the related marks of Samhoo products, such as the serial number, should be maintained clear and complete and not be torn up.

1. The warranty card should be a complete warranty card which is filled in and stamped by Samhoo or the authorized dealers.

The contents on the warranty card should include the product name, manufacturing serial number, date of purchase, marketing unit and so on.

2. The effective invoice should be supervised by the fiscal and taxation departments and it is an important voucher. The filling content on the invoice should include the product name, manufacturing serial number, date of purchase, amount of purchase and so on.

Quality Assurance and Maintenance Terms

Note:

- This product must be sent back to the headquarters of the service or our overseas service station for the repair.
- The waterproof terminals(the waterproof level should be up to or above 6)must be sent back to the service headquarters, our overseas service station or the maintenance station of authorized dealers for repair.
- Please pack the product well with the required documents and detailed description of malfunction and send to our company or the designated service points. You can also get help by dial our service hotline:0086-755 8316 0260.

3. The terms of this service do not include the following contents.

- 1.Beyond the valid period of warranty.
- 2.The malfunction or damage caused by the use or maintenance which are not according to the specification.
- 3.The malfunction or damage caused by the abnormal or unconventional use.
- 4.The malfunction or damage caused by the modification, change, remove, using non-original attachments or batteries, or upgrading software and removing firmware without Samhoo's authorization.

- 5.The fault or damage to the antenna is not caused by the materials or processing.
- 6.The related marks on the radio are torn up or erased, the serial number can not be identified.
- 7.The products whose purchase date cannot be identified.
- 8.The malfunction or damage caused by the force majeure.
- 9.The normal abrasion.
- 10.The battery with following circumstance:
 - a.Artificially damaged or opened.
 - b.Use the abnormal equipment to make a battery charging.

Special note:

1. Within the limits of law, in any case, Samhoo has no liability for the loss that is more than the product purchase price, meanwhile, Samhoo is not liable for any loss of use, loss of time, loss of business, loss of profits or income, and the incidental, special or secondary damage.
2. Since the environment or system of using the product are different. Samhoo is not responsible for the coverage area of the whole system or the operation conditions.
3. The maintenance clauses are enacted in accordance with relevant national warranty regulations. Due to the technical development and market adjustment, the clauses will be changed accordingly. The specific changes are subject to Change Notice issued by samhoo customer service center. For other matters not mentioned here, will be subject to relevant national regulations.

FCC Statement

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

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

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Energy Exposure Awareness and Control Information and Operational Instructions for Occupational Use

Notice: this radio is intended for use in occupational/controlled conditions where users have full knowledge of their exposure and can exercise control over their exposure to meet the occupational limits in FCC and International standards. This radio device is NOT authorized for general population consumer use.

Federal Communication Commission (FCC) Regulations

When Digital Two-Way Radios used as a consequence of employment, the FCC requires users to be fully aware of and able to control their exposure to meet occupational requirement. Exposure awareness can be facilitated by the use of a product label directing users to specific user awareness information. Your Digital Two-Way Radio has a RF Exposure Product Label. Also, your Digital Two-Way Radio user manual includes information and operating instructions required to control your RF exposure and satisfy compliance requirements.

Compliance with RF Exposure Standards

Your Digital Two-Way Radio is designed and tested to compliance with a number of national and international standards and guidelines for human exposure to radio frequency electromagnetic energy. This radio complies with the IEEE (FCC) and ICNIRP exposure limits for occupational/controlled RF exposure environments at operating duty factors of up to 50% talk – 50% listen and is approved for occupational use only. In terms of measuring RF energy for compliance with these exposure guidelines, your radio generates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.

Your Digital Two-Way Radio complies with the following RF energy exposure standards and guidelines:

- United States Federal Communications Commission (FCC), Code of Federal Regulations;
- Institute of Electrical and Electronic Engineers (IEEE) C95.1
- International Commission on Non-ionizing Radiation Protection (ICNIRP)

RF Exposure Compliance and Control Guidelines and Operating Instructions for Two-Way Radio Operations

To control your exposure and ensure compliance with the occupational/controlled environment exposure limits, always adhere to the following procedures;

- DO NOT remove the RF Exposure Label from the device
- User awareness instructions should accompany device when transferred to other users.

Operational Instructions and Training Guidelines

To ensure optimal performance and compliance with the occupational/controlled environment RF energy exposure limits in the above standards and guidelines, users should transmit no more than 50% of the time and always adhere to the following procedures;

- In front of the face, hold the radio in a vertical position with microphone (and other parts of the radio including the antenna) at least one inch (2.5 centimeters) away from the nose or lips. Keep the radio at a proper distance is important to ensure compliance.
Note: RF exposure decrease with increasing distance from the antenna.
- Body Worn Operation; when worn the body, always place the radio in an approved clip, holder, or body harness for this product.
Using approved body-worn accessories is important because the use of non-approved accessories may results in exposure levels, which exceed the occupational/controlled environment RF exposure limits
Using only approved supplied or replacement antennas, batteries, and audio accessories, use of non-approved antennas, batteries, and wired or wireless accessories may exceed the applicable RF exposure guidelines (IEEE, ICNIRP or FCC).

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