

35100427_RevA		TO USERS		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:		SAFETY INFORMATION	
Digital Radio		Thank you for purchasing our product! This Manual (contains both analog and digital radios) is designed to make you quickly grasp the use of the device. In order to avoid physical injury or property loss due to improper operation, please read this Manual carefully before using the device.		• 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. 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.		In order to use the radio safely and efficiently, please read the following safety information: • The radio can only be maintained by professional technicians. Do not disassemble the radio without permission. • Only the batteries and chargers specified by our company can be used. • To avoid problems caused by electromagnetic interference and electromagnetic compatibility, please turn off the radio in places where the "Please turn off the radio" sign is displayed, such as hospitals and other health care places. When taking the flight, please turn off the radio if the crew requests to do so. • In vehicles with airbags, do not place the radio in the area where airbag deployment may be involved. • Please turn off the radio before entering flammable or explosive environment. • Do not replace or charge the battery in a flammable or explosive environment. • Please turn off the radio before approaching the blasting area and the detonator area. • Do not use the radio with damaged antenna. A damaged antenna may cause minor burns when it comes into contact with the skin.	
QUICK START GUIDE		The device meets the requirements of FCC PART 90 and PART 15. Local laws and regulations shall be complied with when setting up or using the equipment, and corresponding qualifications and relevant procedures shall be obtained if necessary. Consulting the relevant authorities is suggested.		ISED RSS warning This product meets the applicable Industry Canada technical specifications. / Le présent matériel est conforme aux spécifications techniques applicables d'Industrie Canada.		(3)	
Do not expose the radio to direct sunlight for a long time or place it near the heating Radio. • If you wear a portable radio, make sure the antenna is at least 2.5 cm away from your body when the radio is transmitting. WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. CAUTION: Use the approved charger to charge the battery. The remaining lithium-ion battery is limited to 30% pursuant to the new lithium battery shipment regulation approved by International Air Transport Association (IATA). Before use, charge the battery. It is recommended that the radio remain powered off during charging. Use of battery not recommend or replaced with incorrect type of battery may result in a risk of fire and explosion or personal injury. Maximum ambient temperature around the power supply equipment including charger must not exceed 40 °C (104°F) and device operating temperature not exceed 55 °C (131°F).		exposure limits always adhere to the following procedures. Guidelines: • Do not remove the RF Exposure Label from the device. • User awareness instructions should accompany device when transferred to other users. • Do not use this device if the operational requirements described herein are not met. Operating Instructions: • Transmit no more than the rated duty factor of 50% of the time. To transmit (talk), push the Push-To-Talk (PTT) button. To receive calls, release the PTT button. Transmitting 50 % of the time, or less, is important because this radio generates measurable RF energy exposure only when transmitting (in terms of measuring for standards compliance). • Hold the radio in a vertical position in front of face with the microphone (and the other parts of the radio, including the antenna) at least one inch (2.5 cm) away from the nose. Keeping the radio at the proper distance is important because RF exposures decrease with distance from the antenna. Antenna should be kept away from eyes. • When worn on the body, always place the radio in approved clip, holder, holster, case, or body harness for this product. Using approved body-worn accessories is important because the use other manufacturer's non-approved accessories may result in exposure levels, which exceed the occupational/controlled environment RF exposure limits.		• If you are not using a body-worn accessory and are not using the radio in the intended use position in front of the face, then ensure the antenna and the radio are kept at least 2.5 cm (one inch) from the body when transmitting. Keeping the radio at the proper distance is important because RF exposures decrease with increasing distance from the antenna. • Use only manufacturer's approved supplied or replacement antennas, batteries, and accessories. Use of non-manufacturer-name approved antennas, batteries, and accessories may exceed the FCC and IC RF exposure guidelines. • For a list approved accessories please consult your local dealer for information.		(cases). As defined by the WEEE directive, this cross-out trash bin label means that customers and end-users in EU countries.	
RF Exposure Compliance and Control Guidelines and Operating Instructions To control your exposure and ensure compliance with the occupational/controlled environment		(4)		EU Regulatory Conformance As certified by the qualified laboratory, the product is in compliance with the essential requirements and other relevant provisions of the following directives: 2014/53/EU, 2011/65/EU, and 2012/19/EU. Please note that the above information is applicable to EU countries only.		(6)	
Les instructions de sensibilisation des utilisateurs doivent accompagner l'appareil lors de leur transfert à d'autres utilisateurs. • N'utilisez pas cet appareil si les exigences opérationnelles décrites ici ne sont pas remplies. Mode d'emploi: • Ne transmet pas plus que le facteur de marche nominal de 50% du temps. Pour transmettre (parler), appuyez sur le bouton Push-To-Talk (PTT). Pour recevoir des appels, relâchez le bouton PTT. La transmission 50% du temps, ou moins, est importante car cette radio génère une exposition mesurable à l'énergie RF uniquement lors de la transmission (en termes de mesure pour la conformité aux normes). • Tenez la radio en position verticale devant le visage avec le microphone (et les autres parties de la radio, y compris l'antenne) à au moins 2,5 cm du nez. Garder la radio à la bonne distance est important car les expositions RF diminuent avec la distance de l'antenne. L'antenne doit être tenue à l'écart des yeux. • Lorsqu'il est porté sur le corps, placez toujours la radio dans un clip, un support, un étui, un étui ou un harnais de corps approuvé pour ce produit. L'utilisation d'accessoires approuvés par le corps est importante car l'utilisation d'accessoires non approuvés par d'autres fabricants peut entraîner des niveaux d'exposition qui dépassent les limites d'exposition aux RF des		environnements professionnels / contrôlés. • Si vous n'utilisez pas d'accessoire porté sur le corps et n'utilisez pas la radio dans la position d'utilisation prévue devant le visage, assurez-vous que l'antenne et la radio sont maintenues à au moins 2,5 cm (un pouce) du corps lors de la transmission. . Il est important de garder la radio à la bonne distance, car les expositions RF diminuent avec l'éloignement de l'antenne.		PRODUCT CONTROL		LED Indicator	
INFORMATION CONCERNING SAR FOR FCC		Max. SAR Level(s) Reported		Limit (W/Kg)		Radio Status	
1.35 W/kg 1g Head SAR		1.92 W/kg 1g Body SAR		8.0		Standby	
PTT key		Program key		Menu key		Up key	
Down key		Accessory connector		Loudspeaker		POWER key	
Microphone		Charging contact				Receive (RX)	
Battery Installation		1. Press the dots on the battery cover and slide to remove the battery cover.		2. Attaching the lithium battery pack to battery compartment.		Programming Mode (Read from Radio)	
						Programming Mode (Write to Radio)	
3. Close the battery cover properly.		Antenna Installation		Belt Clip Installation		Battery Installation	
Note: To remove the battery pack, please turn off the radio first.		Note: Do not hold the radio by the antenna, as it may reduce radio performance and service life of antenna.		Align the screw holes on the belt clip with those on the radio, and tighten belt clip with screws.		1. Press the dots on the battery cover and slide to remove the battery cover.	
Antenna		PTT key		Program key		Menu key	
Up key		Down key		Accessory connector		Loudspeaker	
POWER key		Microphone		Charging contact			
Charging Function		1. This product can support both radio charging and battery pack charging. 2. When charging base is used for charging, the indicator is red during charging and changes to green after full charging.		(I) radio charging		(II) Battery pack charging	
Charging Precautions:		• Please use the matching charging base of the model for charging. • When charging the device, it is recommended to turn off the radio first. • To obtain the best battery performance, please charge for at least 5 hours for the first time. • Do not charge the battery pack for a long time, otherwise					
it will shorten the battery pack life. When the battery is fully charged, please stop charging in time. • The charger can only be used to charge the battery pack of the product. Do not use it to charge other battery packs, otherwise the charger and battery pack may be damaged. • The battery pack should be stored in a cool and dry place after being fully charged. Do not expose the battery pack near the fire or to the sun, otherwise there are safety risks. • During charging, it is not recommended to transmit the radio. • The battery pack may slightly heat up during charging, which is a normal phenomenon.		Accessory Installation		1. Open the accessory connector cover.		2. Align the plug of the accessory (matching headset or programming cable) with the accessory connector.	
2. For the analog channel that requires intercom, please set the transmitter and receiver to the same sub-audio frequency. 3. If encryption is enabled for the digital channel that requires intercom, please set the transmitter and receiver to the same password. 4. For the digital channel that requires intercom, please set the transmitter and receiver to the same color code. 5. Transmit/receive at high/low power (switch by P1/P2 key). 6. After inserting the headset, press the [PTT] key to transmit and receive speech through the headset. 7. Transmit with VOX headset after enabling VOX (turn on/off VOX through side key and insert the VOX headset).		MENU SELECTION		1. The [Menu] key were set to (i) switch channel, (ii) set high/low power, and (iii) turn on/off scanning. Continue press menu button to enter to next function. 2. If the radio is not operated for 3 seconds or [PTT] key is pressed, it will exit the menu mode.		CHANNEL SCANNING	
TRANSMITTING/RECEIVING		Press and hold the [PTT] key to transmit the signal of the current channel and the red LED indicator is on. Release the [PTT] key to receive the signal from the same channel, the speaker will make a call sound and the green LED indicator will be on when a signal is received.		PRECAUTIONS FOR RADIO OPERATION		PROGRAM KEY	
When the radio is transmitting, keep the radio in a vertical position, and keep the microphone 2.5-5 cm away from the mouth. When transmitting, the radio should be at least 2.5 cm away from the head or body. • Do not turn on/off the radio repeatedly during use, and adjust the volume to a level suitable for your hearing. 1. Before using the radio for communication, please set the transmitter and receiver to the same frequency point.		SETTING/CHANGING FREQUENCY		1. Frequency range: 430MHz -470 MHz (base on models) 2. The frequency can be set to any value within this range. 3. In DM mode, you can talk only when the transmitting frequency and receiving frequency are the same. 4. In DMR repeater mode, the transmitting frequency and receiving frequency are different, but it needs to be supported by repeater.		1.Configure the functions of [Program] key through programming software. 2.The [Program] key includes the following functions: Scan On/Off, High/Low Power Switch, iVOX/VOX On/Off, Monitoring Mode, One Touch Call, Emergency Alarm, etc. 3.Write the set parameters to the radio and press the corresponding [Program] key to enter the corresponding function.	
SETTING SUB-AUDIO FREQUENCY		1.The sub-audio frequency supports CTCSS, DCS positive code, DCS reverse code, standard sub-audio and non-standard sub-audio. 2.Only when the transmitting sub-audio and receiving sub-audio are the same can they talk to each other. 3.A radio with sub-audio can transmit to radio without, but cannot receive signal without sub-audio.		CHANNEL SPACING		DEVICE NAME CONFIGURATION AND MODIFICATION	
1. There are two types of channel spacing: 12.5K, 12.5 is narrow-band. 2. Radios with same frequency point and different channel spacing can talk to each other.		TOT FUNCTION		In order to prevent some users from occupying the same channel for a long time, users can set to enable the TOT function. When the user's continuous transmission time on the current channel reaches the set time, the radio will stop		1.Enter the basic setting interface of programming software to enter the device name with any 16 characters. 2.Device name can support: Letters, numbers, Chinese, special characters, etc.	
DIGITAL ENCRYPTION		1. Add key through programming software, which only supports basic encryption, maximum 8 characters. 2. Supported characters include: numbers, uppercase letters, lowercase letters. 3. The same encryption template must be configured for transmitter and receiver for normal intercom, otherwise the speech content cannot be heard clearly. 4. The main purpose is to prevent the content of the speech from being monitored by other people at the same frequency.		COLOR CODE		DEVICE ID	
1. For digital channels, the color code must be same to call. 2. The color code range of this product can be set: 0-15.		CALL PROMPT (PRIVATE CALL ONLY)		1. Configure one touch call through programming software for private call contacts. 2. After writing to the radio, press the side key to trigger the call prompt. 3. After the transmitter triggers the call prompt, the receiver's red indicator will flash.		1.The device ID is related to the private call contact, and the ID range is 1-167/6415 2.When using a private call contact to call the other party, enter the device ID of the other party and then call.	
CONTACTS		1. Contacts are only valid for digital channels. 2. There are three kinds of contacts: private call, group call and all call, which need to be configured through the programming software.		REMOTE MONITOR (PRIVATE CALL ONLY)		DTMF FUNCTION	
1. Configure one touch call through programming software to select remote monitor. 2. Press the preset side key to monitor the other party remotely. 3. After successful monitoring, the green indicator will always be on, and the sound around the other party can be clearly monitored.		POWER SAVING FUNCTION		To extend battery life, the user can enable power saving mode. When the power saving function is enabled, if no valid signal is received or no key operation is performed within 5 seconds, the radio will automatically enter the power saving mode. In the power saving mode, the user can press [PTT] key to transmit or the radio can receive		1. The DTMF interface of the programming software can configure the DTMF function, such as side tone, duration, interval time, online telegram code, offline telegram code, transmission start sound, transmission end sound, transmission start and end sound. 2. After the transmitter turns on the side tone, when the [PTT] key is pressed to transmit, the transmitter itself will also give DTMF sound. 3. DTMF coded content only supports numbers 0 - 9, letters: ABCD, and characters: * #.	
OPTIONAL ACCESSORIES		The main accessories of the Radio are included in the product packaging box. For more information about accessories, please consult your local dealer. Note: Please use the accessories specified by our company. If you use unauthorized accessories, you shall be responsible for all the consequences.		DISCLAIMER		EMERGENCY CALL	
This manual strives for the accuracy and completeness of its content during the preparation. Repeated review has been carried out, and the company will not assume any responsibility for errors or omissions that may occur during the output and printing process. In addition, due to the continuous development of technology, the company reserves the right to change the product design and specification without prior notice.		GUARANTEE CARD		Model Number: _____ Serial Number: _____ Purchasing Date: _____ Dealer: _____ Telephone: _____ User's Name: _____ Telephone: _____ Address: _____ Post Code: _____ REMARKS: 1.This guarantee card to be kept by the user ,no replenishment if lost. 2.This guarantee card to be filled & chopped by the dealer,or it is invalid. 3.Don't alter the guarantee card,please confirm the serial number on the guarantee card is same as that on the machine. 4.Warranty void if seal broken. 5.1 year guarantee for product, 6 months for charger,battery and antenna . 6.The user can get repairing service from the following ways: a. Go to the shop where you buy the machine b. Our local repairing agent		1. Configure functions of the emergency call through programming software, such as alarm channel, re-transmission times, and tone type. 2. Emergency call supports the digital channel and analog channel. 3. Set the side button as the "Emergency Call" button in the "programmable button". 4. When Analog or Digital channel triggers emergency call, an emergency call code will be sent. Emergency call will be automatically transmitted after remaining re-transmit call becomes 0, and automatic emergency calls will repeat transmit twice. 5. The transmitter will sound the alert tone after the	
4. The radio voice announcement is defaulted to English		CHOP BY DEALER				LOW VOLTAGE ALARM FUNCTION	
1. When the battery voltage is lower than 3.3V, the radio will prompt "Please charge" once (every 20 seconds) and the red LED indicator will flash quickly. At this time, the radio cannot transmit and stays in standby and receiving modes only. Please replace with a new battery or charge the battery. 2. When the battery voltage is lower than 3.0V, the radio will shut down automatically. Please replace with a new battery or charge the battery.		LANGUAGE SETTINGS		1. Language supports: Chinese and English. 2. Language can be set by programming software. 3. After switching the language, all voice broadcast will be changed to the language.			
(28)		(25)		(26)		(27)	