

FUNCTION DESCRIPTIONS

1) Squelch Adjustment

Functions: Squelch system allows you to mute the background noise when no signal is being received. Not only does the Squelch system "standby" operation more pleasant, but also significantly reduces battery current consumption.

2)Preset Channel Selection

Functions: Preset the signal type (OFF/DTMF/2T/5T) at software, by choosing 1-16 channel to achieve remote kill stun/activate/revive function. Enter Menu 10th to choose 1-16 channel.

3)Transmitter Time-out-Timer

Functions: the TOT feature provides a safety switch which limits transmission to a preprogrammed value. This will promote battery conservation by not allowing you to make excessively-long transmissions. in the event of a stuck PIT switch, it can prevent interference from other users as well as battery depletion.

4) Busy Channel Lock-out

Functions: the BCLO feature prevents the radio's transmitter from being activated if a signal is strong enough to break through the "noise", squelch is present. On a frequency where stations using different CTCSS or DCS codes may be active, BCLO prevents you from disrupting their communications accidentally (because your radio may be muted by its own tone decoder).

Carrier: the radios PTT will be prevented only the frequency is busy using.

Sub: the radio's PTT will be prevented only the frequency and tone coder is the same.

5)Transmit Over Beeper

Functions: sending a beeper to inform the receiver TX is over.

6)Voice Prompt

Functions: enable/disable voice prompt. Default: ON

7) CTCSS/DCS Operation

Many repeater systems require a very-low-frequency audio tone that be superimposed on your FM carrier in order to activate the repeater This helps prevent false activation of the repeater by radar or spurious signals from other transmitters.

This transceiver has 50 groups CTCSS,105 groups normal/inverted DCS

8) VOX Level & Vox Switch

Functions: the VOX function provides automatic transmit/receive switching based on the voice that is input to the microphone. With the VOX switch ON, you do not need to press PTT key to transmit, and it is not necessary to use a VOX headset for VOX operation.

When the computer program "Side Key 1" or "Side Key 2" selects the VOX Switch, operate the side key to turn on VOX. Operate the side key to turn off VOX.

You can set VOX level from 1 to 9 via program software. The higher level is, the lower sensitive it will be.

USER’S MANUAL

PTTalky FR2 / FR2 PLUS

FRS FM TRANSCEIVER

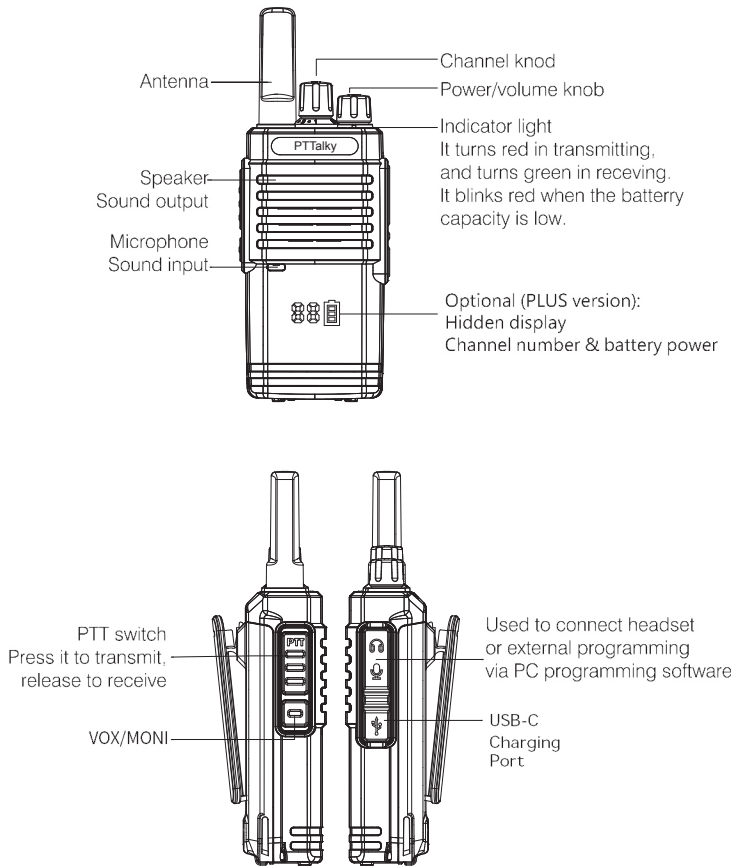
Two way radio

TOT / Scan / Voice Prompt / Battery save function
VOX / Low battery prompt / Narrow bandwidth
CTCSS / DCS / BCL/Monitor/ Squelch

Software:
<https://pttalky.s3.amazonaws.com/FR2.exe>
<https://pttalky.s3.amazonaws.com/FR2+PLUS.exe>

Setting Factory				
NO	Frequency	CTCSS/DCSS	Bandwidth	Power
1	462.5625	OFF	Narrow	High
2	462.5875	OFF	Narrow	High
3	462.6125	OFF	Narrow	High
4	462.6375	OFF	Narrow	High
5	462.6625	OFF	Narrow	High
6	462.6875	OFF	Narrow	High
7	462.7125	OFF	Narrow	High
8	462.5500	OFF	Narrow	High
9	462.5750	OFF	Narrow	High
10	462.6000	OFF	Narrow	High
11	462.6250	OFF	Narrow	High
12	462.6500	OFF	Narrow	High
13	462.6750	OFF	Narrow	High
14	462.7000	OFF	Narrow	High
15	462.7250	OFF	Narrow	High
16	462.5625	OFF	Narrow	High

GETTING FAMILIAR



BASIC OPERATION

1. Indicator

Indicator turns red when transmitting, and it turns green when receiving.

2.Channel Knob

Rotate the knob to select the channel 1 to channel 16, counterclockwise rotate to decrease the value of channel name, clockwise rotate to increase the value of channel name.

3.Power Knob/Volume Knob

Clockwise rotate to turn on the radio, and counterclockwise rotate to turn off the radio. Rotating the knob can adjust the volume.

4. PTT switch

Press PTT switch and then talk to the microphone, the indicator light turns red, if the channel does not have transmitting frequency, a “DU DU” tonesounds, and indicator light turns red. Release PTT switch to receive, it lights green when there is signal.

5.Squelch level

The squelch level will determine the signal strength to open the speaker of the radio. If the squelch level is lower, the background noise of opening the radio speaker will be higher, and the corresponding communication range will be further, but the anti-interference capacity will be weaker. The default setting of squelch level is 3, you can adjust it through the menu “Squelch level” of the “Optional Features” in the programming software. Level 0 to 9 can be selected. 0 is the lowest level.

6.Monitor

Press the MONI button to monitor different DCS calls at the same frequency or press the button to listen when the signal strength does not reach the threshold.

7.TOT

The purpose of TOT is to prevent any radio from talking in one channel for a long time, and to prevent the transceiver from being damaged because of continuous transmission. If the transmitting time exceeds the TOT pre-set time, the radio will sound “DU” and stop transmitting, release the “PTT” key to back to receive status and stop sound “D”.

8. Scan Set by software

When the current channel is channel 16, the radio will automatically detect the 16

channels which defined as scan. When the channel which is rescanned has signal, the radio will stop in the channel to communication. Notice:

- A. When the scannable channels is less than 2 channels, radio can't go to scan.
- B. When the radio is stopping in the channel which has signal, after the signal disappears 10s, the radio will scan the next channel. If radio do not want to scan, please choose the “No” in the “Scan Add” for every channel.

9.English voice prompt

The voice prompt can be selected “English/None” through the programming software.

10.Battery save function

This function can be set by the software.

Turn on this function can make the standby time more longer.

11. Low battery alert

Notice:

When the voltage is lower than a certain level, if the voice selection is turned off, the sound of “DuDu” will appear every 15 seconds. If the voice is on, it will prompt “please charge.” If the voice choice of Chinese or English, press PTT key or Vox transmission is invalid and the sound of “please charge” will still prompt, at the same time, the sound “Du” will ring until PTT release or Vox end.

12.Busy channel lock

If the busy lock is set, press PTT after receiving the signal to prohibit transmission and sound “Di” is ringing until PTT release.

13.Press & Hold 3 seconds the side Key to turn on VOX

Speak to the microphone in normal voice to transmit, no need to press PTT key. A: when VOX is on in your working channel. Speak to the microphone directly, it will transmit automatically.

The radio stops transmitting when there is no voice, and waits for receiving. B: When a headset with a microphone is used. When VOX is on, you should VOX gain for the radio to identify voice volume. If the microphone is too sensitive, the noise around the radio will start transmitting.

If the microphone is not sensitive, the radio can not collect your voice, please adjust VOX level well to guarantee smooth communications.

STATEMENTS WARNING AND COMPLIANCE STATEMENT

FCC Warning Statement

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 including received interference that may cause undesired operation.

The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment. Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the local government radio management department's equipment authorization for this radio could violate the FCC rules.

Note: 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.

FCC RF Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. Do not use this device when the antenna shows obvious damages. Hold this transmitter approximately 25 mm away from your face and speak normally with the antenna pointed up and away. Use the supplied belt clip for body-worn configuration as other accessories may not comply to the limits.

ISED Warning Statement

It is up to the user to properly operate this radio transmitter to insure safe operation. Please adhere to the following:

- Use only the supplied or an approved antenna. Unauthorized antennas, modifications, or attachments could impair call quality, damage the radio, or result in violation of IC regulations.
- Do not use the radio with a damaged antenna.
- If a damaged antenna comes into contact with the skin, a minor burn may result.

Please contact your local dealer for a replacement antenna. Use of the radio in Canada is subject to the rules & regulations of IC. Changes or modifications not expressly approved by our may void the user authority granted by the IC to operate this radio and should not be made. To comply with IC requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services. Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the IC equipment authorization for this radio could violate IC rules.

Note: Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited. Important: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device. Your radio is set up to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the radio to exceed those limitations. Any adjustments to your radio must be made by qualified technicians. To be safe and sure:

- Never open your radio's case
- Never change or replace anything in your radio except the battery.
- Any attempt to change frequencies or output power of the radio invalidates the approval. Utilisation de la radio au Canada est assujettie aux règlements de la société radio.
- Canada. Toute modification ou modification qui n'est pas expressément approuvée par la compagnie peut invalider les droits d'utilisation accordés par IC pour l'exploitation de cette radio et ne devrait donc pas être modifiée ou modifiée.

Pour se conformer aux exigences d'IC, le réglage de l'émetteur ne doit être effectué

par ou sous la supervision d'une personne techniquement qualifiée qui effectue l'entretien et la réparation de l'émetteur dans un Service mobile et fixe terrestre privé et qui est certifiée par un représentant de l'Organisation de l'utilisateur du service. Le remplacement de tout composant émetteur (cristal, semi-conducteur, etc.) qui n'est pas autorisé par l'équipement IC peut enfreindre les règles de l'IC. Note: L'utilisation de cette radio à l'extérieur du pays où elle est destinée à être distribuée est soumise à des règlements gouvernementaux et peut être interdite. Important: Toute modification ou modification qui n'est pas expressément approuvée par la partie responsable de la conformité peut priver l'utilisateur de l'autorisation d'utiliser cet appareil. Votre radio est réglée pour envoyer le signal spécifié à la fréquence spécifiée. Il est illégal de modifier ou d'ajuster les réglages internes de la radio au-delà de ces limites. Tout réglage de la radio doit être effectué par un technicien qualifié. Pour la sécurité et la fiabilité: -n'ouvrez pas le boîtier de la radio. -Ne remplacez ni ne remplacez rien à la radio, à l'exception de la batterie. -Toute tentative de modification de la fréquence radio ou de la puissance de sortie invalidera la certification.

ISED RF Exposure Statement

This EUT is compliance with SAR for controlled exposure limits in IC RSS-102 at operating duty factors of up to 50% and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528 and IEC 62209. This equipment should be installed and operated with a minimum distance of 25mm must be maintained when held-to-face, and body-worn operations are restricted to the approved original accessories (belt clip), a minimum distance of 0 cm. Cet EUT est conforme au SAR pour les limites d'exposition contrôlées dans IC RSS-102 à des facteurs de service allant jusqu'à 50% et a été testé conformément aux méthodes et procédures de mesure spécifiées dans IEEE 1528 et IEC 62209. Cet équipement doit être installé et utilisé avec une distance minimale de 25 mm doit être maintenu lorsqu'il est tenu face à face, et les opérations portées sur le corps sont limitées aux accessoires d'origine approuvés (clip de ceinture), une distance minimale de 0 cm.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW. AVERTISSEMENT: LES RÈGLES DE LA ISED ET LA LOI FÉDÉRALE INTERDISENT LA MODIFICATION DE CET APPAREIL POUR RECEVOIR DES SIGNAUX DU SERVICE DE RADIOTÉLÉPHONIE CELLULAIRE.

SPECIFICATIONS

GENERAL

Frequency range: FRS
Channel: 16
Working voltage: 3.7V
Working temperature: 0°C ~ +40°C
Dimension: 160mm × 61mm × 36mm

TRANSMITTER

Power: ≤ 2W
Modulation type: 11KF3E
Spurious radiation: ≤ 7.5 μV
Modulation noise: < -40dB
Modulation response: < 5%
Frequency tolerance: 5ppm

RECEIVER

Sensitivity: ≤ 0.2 μV
Occupied bandwidth: ≤ 11KHz
Channel selective: ≥ 65dB
Inter-modulation: ≥ 55dB
Audio power: > 500mW
Audio distortion: ≤ 5%
Frequency tolerance: 5ppm
Current: 150mA
Audio response(300–3000Hz): +7 ~ 12.5dB