

SAFETY INFORMATION

Please read this information before using your radio. Failure to do so could result in personal injury, death, and/or damage to your radio, accessories and/or other property.

Radio Care

Caution

- Do not disassemble or modify the radio for any reason.
- Do not transmit while touching the antenna terminal or any exposed metallic parts of the aerial as this may result in burn.
- Please check and observe regulation in your country with regards to use whilst driving.

End of Life Disposal

When your radio reaches the end of its useful life, please ensure that the unit is disposed of in an environmentally friendly way.

Battery Care

Precautions

- Turn the radio OFF before charging.
- Charge the battery pack before use.
- Do not charge the radio and battery pack if they are wet.

The battery pack includes potentially hazardous components. Please:

- Do not disassemble or reconstruct battery.
- Do not short-circuit the battery.
- Do not incinerate or apply heat to the battery.
- Do not immerse the battery in water or get it wet by other means.

- Do not charge the battery near fires or under direct sunlight.
- Use only the specified charger and observe charging requirements.
- Do not pierce the battery with any object or strike it with an instrument.
- Do not use the battery pack if it is damaged in any way.
- Do not reverse-charge or reverse-connect the battery.
- Do not touch a ruptured or leaking battery.

If liquids from the battery get on your skin or into your eyes, immediately:

- Wash your eyes out with fresh water avoiding rubbing them.
- Seek medical treatment.

FCC Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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.
2. This device must accept any interference received, including interference that may cause undesired operation.

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.

ISED RSS Warning:

This device complies with Innovation, Science and Economic Development Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et.

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Exposure Information (SAR)

SAR NOTICE:

This device meets the FCC and ISED radiation exposure requirements set forth for an uncontrolled environment.

The requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue.

SAR tests are conducted using standard operating positions accepted by the FCC/ISED with the device transmitting certified power level, the actual SAR level of the device while operating can be well below the maximum value.

For body worn operation, this device has been tested and meets the FCC/ISED RF exposure guidelines when used with for this product or when used with and accessory that contains no metal.

To maintain compliance with the FCC/ISED's RF exposure guidelines, hold the transmitter and antenna at least 1

inch(2.5 centimeters) from your face and speak in a normal voice, with the antenna pointed up and away from the face., This equipment complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment. In order to comply with the FCC/ISED RF exposure requirements, the antenna installation must comply with following:
Users must be fully aware of the hazards of the exposure and able to exercise control over their RF exposure to qualify for the higher exposure limits.
Your wireless hand-held portable transceiver contains a low power transmitter. This product sends out radiot
Push-to-Talk (PTT) Button is pressed.
The device is authorized to operate at a duty factor not to exceed 50%.

Les Les tests SAR sont effectués à l'aide d'une position de fonctionnement standard acceptée par la isedc, où l'équipement transmet à son niveau de puissance certifié le plus élevé dans toutes les bandes de fréquences testées, et bien que le SAR soit déterminé au niveau de puissance certifié le plus élevé, le niveau de SAR réel de L'équipement en fonctionnement peut être bien inférieur au maximum. Les véhicules neufs doivent être testés et certifiés à l'isedc avant d'être vendus au public et ne doivent pas dépasser les limites d'exposition fixées par l'isedc. Les tests de chaque produit sont effectués aux endroits et aux endroits requis par isedc. Pour une utilisation sur le corps, l'appareil est testé et conforme aux directives d'exposition aux RF de l'isedc lorsqu'il est utilisé avec les accessoires spécifiés pour ce produit ou avec des accessoires sans métal.
Pour rester en conformité avec les directives d'exposition aux RF de l'isedc, maintenez l'émetteur et l'antenne à au moins 1 pouce (2,5 cm) du visage et parlez d'une voix normale, l'antenne étant dirigée vers le haut et éloignée du visage. L'appareil est conforme aux limites d'exposition aux rayonnements spécifiées par l'isedc pour les environnements

non contrôlés. Pour être conforme aux exigences d'exposition aux RF de l'isedc, l'installation de l'antenne doit répondre aux exigences suivantes:

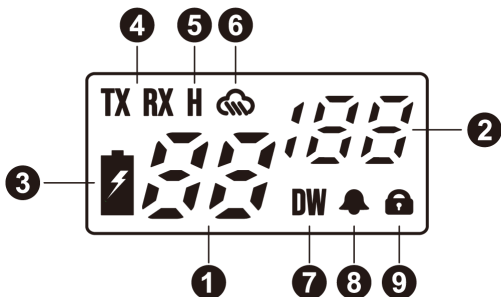
Les utilisateurs doivent être pleinement conscients des dangers de l'exposition et être en mesure de contrôler leur exposition aux RF afin de se conformer aux limites d'exposition plus élevées.

Votre émetteur - récepteur portatif sans fil contient un émetteur de faible puissance. Ce produit émet un signal de radiofréquence (RF) Lorsque vous appuyez sur le bouton Push to talk (PTT).

L'installation est autorisée à fonctionner avec un facteur d'occupation ne dépassant pas 50%.

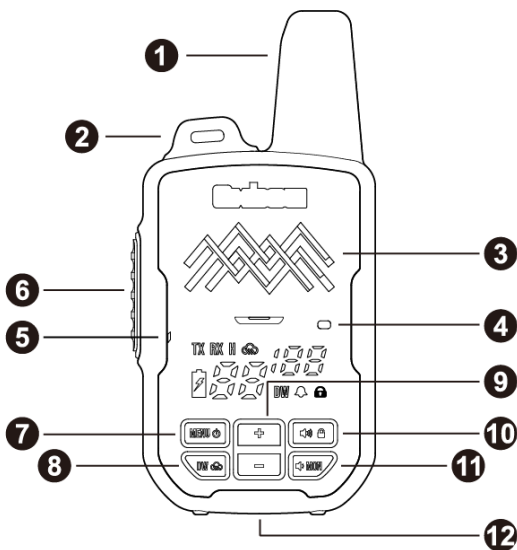
RADIO OVERVIEW

LCD Display



1. Selected channel
2. Selected privacy code (CTCSS: 1-38 / DCS: 39-121)
3. Battery status indicator
Green: high battery level
Orange: medium battery level
Red: low battery level
4. **RX:** radio in receive mode (busy)
TX: radio in transmission (**PTT** pressed)
5. Power channel selected (Channels 1-7, 15-22)
6. Weather mode activated
7. Dual channel watch activated
8. Roger beep activated
9. Keypad lock activated

Radio Components



1 - Antenna

2 - Tether Loop

For attaching safety tether to backpack.

3 - Built-in Speaker

4 - LED Indicator

Indicates radio transmitting, receiving and battery charging status.

5 - Built-in Speaker

6 - PTT (Push-To-Talk) Button

Press and hold down this button to transmit and talk, release it to receive and listen.

7 - ON / OFF / MENU Button

Hold this button for approx. 3 seconds to power the radio on or off. Press button again to enter the radio menu.

8 - DW / Button

Press this button to activate dual channel watch function. Hold the button for approx. 3 seconds to activate the weather mode.

9 - Channel Up / Down

Press these buttons up & down to change the channel. Hold these buttons for approx. 3 seconds to change the channel quickly.

10 - Volume Up / Keypad Lockout

Press this button to increase the radio volume. Hold the button for approx. 3 seconds to activate the keypad lockout.

11 - Volume Down / MON

Press this button to decrease the radio volume. Hold the button for approx. 3 seconds to activate monitor function that opens the squelch (for weak signals).

12 - USB-C Charging Port

ADVANCED OPERATON

Monitor

The Monitor feature is for temporarily opening the squelch to listen to signals that are too weak for the radio to receive on its own. To activate the Monitor function, hold the **MON** button for approx. 3 seconds. Repeat it again to exit this function.

NOAA Weather Channels

The radio features 11 NOAA weather channels to monitor the weather conditions in your area. This can be crucial in the backcountry, as having real time weather updates may inform your decisions to push on, turn back, or seek shelter.

Hold the  button for approx. 3 seconds to activate weather mode. The radio will automatically scan for active weather channels in your region. When an active transmission is found, the radio will pause scanning and stay on that weather channel. The up / down channel buttons allow you to change the direction of scanning (from lower channels to higher ones or vice versa).

To exit weather mode, hold the  button for approx. 3 seconds again. The radio will then go back to the regular channel and restore normal communication.

Dual Channel Watch (DW)

The Dual Channel Watch function allows you to monitor and transmit on two different channels, referred to as current channel A and watch channel B, at the same time. This mode can be useful if you are trying to stay in touch with two parties that are using different channels. It offers an easy way to listen and transmit on both channels without having to switch between two channels manually.

Press the **DW** button to activate the DW function, and the **DW** icon will indicate at the bottom of the display. The radio works on current channel A by default, however it is also continually scanning both A and B for transmissions.

1. If a transmission is detected on A, the radio will transmit on A when pressing the **PTT** button.
2. If a transmission is detected on B, the radio will automatically display channel B number & its privacy code, and receive on B until the transmission is complete. Now you have 6 seconds to transmit on B. During this period, pressing the **PTT** button will respond to B only.
3. If there is no operation during these 6 seconds, the radio will then return to display channel A number & privacy code again, but still monitor both two channels.

To disable the DW function, press the **DW** button again and the **DW** icon will disappear.

Note:

Dual Channel Watch mode will consume the radio battery about 25% faster when active, so it should be turned off when not in use.

Keypad Lock

Hold the lock button for approx. 3 seconds to activate keypad lock. Only the **PTT** button will remain active. Hold the lock button again for approx. 3 seconds to exit this function.

MENU OPERATION

Privacy Code Selection

Privacy codes are used to keep group conversations private. When a privacy code has been set, your radio will only receive transmission when the other radios in the group are sending that same privacy code. If someone's radio is set to the same "Channel", but not using a privacy code, then they will be able to receive transmissions from radios using privacy codes but will not be able to send to radios that are using privacy codes.

To activate a privacy code:

1. Select the desired channel.
2. Press the **MENU** button once and the display shows "0" blinking.
3. Push the **+ / -** buttons to select the desired privacy code. Press **PTT** or wait for approx. 5 seconds to exit and confirm the selection.
4. Make sure everyone else in your group is on the same channel with the same privacy code.

Roger Beep

When your transmission is finished (**PTT** released), the radio gives a beep that indicates to the other party that they can start talking. This function is disabled by default.

To activate Roger Beep:

1. Press the **MENU** button until the  icon appears on the display and "OF" is blinking.
2. Use the **+ / -** buttons to select "ON".
3. Press **PTT** to confirm the activation and the  icon will stay solid.

Dual Watch Channel Selection

You can select the channel you'd like as dual watch channel B and set its privacy code in the menu. The channel B can be any of the 22 channels.

To select the dual watch channel, follow these steps:

1. Press the **MENU** button until the **DW** icon appears on the display and middle channel number is blinking.
2. Use the **+** / **-** buttons to select the channel you'd like to monitor.
3. Press the **MENU** button again and the right top privacy code is blinking.
4. Use the **+** / **-** buttons to select the desired privacy code.
5. Press **PTT** or wait for approx. 5 seconds to exit and confirm the selection.

SPECIFICATIONS

General

Frequency Range	TX/RX: 462.5500-462.7250MHz 467.5625-467.7125MHz
Channel Capacity	22 Channels 121 Sub-channels
Channel Bandwidth	12.5kHz
Operating Voltage	3.7V DC
Dimensions (H x W x D)	110x52x25mm(not including Belt Clip)
Weight with battery	145g

Transmitter

RF Power	462.5500-462.7250MHz:31.85dBm 467.5625-467.7125MHz:26.95dBm
Spurious & Harmonics	-36dBm < 1GHz -30dBm > 1GHz
FM Hum & Noise	≥ 36dB
Modulation Deviation	≤ 2.5kHz
Adjacent Channel Power	≥ 60dBC
Audio Frequency Response	+1 ~ -3dB
Audio Distortion	< 5%

Receiver

Sensitivity (12 dB SINAD)	≤ 0.3μV
Adjacent Channel Selectivity	≥ 60dBC
Audio Distortion	< 5%
Radiated Spurious Emissions	< -54dBm
Intermodulation Rejection	70dB
Audio Output	1W @ 8Ω

Weather Channel	Frequency (MHz)
1	162.550
2	162.400
3	162.475
4	162.425
5	162.450
6	162.500
7	162.525
8	161.650
9	161.775
10	161.750
11	162.000

CTCSS FREQUENCY CHART (Hz)

No.	Freq.	No.	Freq.	No.	Freq.	No.	Freq.	No.	Freq.
1	67.0	9	91.5	17	118.8	25	156.7	33	210.7
2	71.9	10	94.8	18	123.0	26	162.2	34	218.1
3	74.4	11	97.4	19	127.3	27	167.9	35	225.7
4	77.0	12	100.0	20	131.8	28	173.8	36	233.6
5	79.7	13	103.5	21	136.5	29	179.9	37	241.8
6	82.5	14	107.2	22	141.3	30	186.2	38	250.3
7	85.4	15	110.9	23	146.2	31	192.8		
8	88.5	16	114.8	24	151.4	32	203.5		

DCS CODE CHART

No.	Code	No.	Code	No.	Code	No.	Code	No.	Code
39	023	56	125	73	245	90	412	107	624
40	025	57	131	74	251	91	413	108	627
41	026	58	132	75	261	92	423	109	631
42	031	59	134	76	263	93	431	110	632
43	032	60	143	77	265	94	432	111	654
44	043	61	152	78	271	95	445	112	662
45	047	62	155	79	306	96	464	113	664
46	051	63	156	80	311	97	465	114	703
47	054	64	162	81	315	98	466	115	712
48	065	65	165	82	331	99	503	116	723
49	071	66	172	83	343	100	506	117	731
50	072	67	174	84	346	101	516	118	732
51	073	68	205	85	351	102	532	119	734
52	074	69	223	86	364	103	546	120	743
53	114	70	226	87	365	104	565	121	754
54	115	71	243	88	371	105	606		

WARRANTY INFORMATION

Warranty Period

2 Years from date of purchase.

Note: Please retain your receipt, as your proof of purchase will be required to validate warranty claim.

Warranty Exclusions

This warranty will not apply in relation to:

- Failure to provide a proof of purchase.
- Product has been modified, changed, or serial number has been removed.
- If any damage is caused by the use of non-approved accessories.
- Product that has been replaced by an unauthorized person.
- Product failure due to customer misuse, abuse, or abnormal use.
- Failure by the customer to take reasonable care.
- Failure due to not using the product in accordance with instructions stated in the manufacture's user guide.
- Product failure due to recommended installation procedures not being followed as stated in the manufacture's user guide.

For more warranty information please visit
www.samtalkie.com/warranty.

Sam Radios Ltd.