ROCKY TALKIE

USER MANUAL

Table of Contents

KNOW YOUR RADIO
Schematic

Primary Channel Flipper
1) Press forward or back to change channel

Secondary
Lock/Unlock Radio: Hold forward 2 seconds
SCAN: Hold back 2 seconds – press any button to stop

Primary Power ON/OFF
1) Hold 2 seconds (double beep sound)

Secondary
Check Battery Life: Press once to display battery %

Waterproof Headset Port (M3)

Primary Set Dual Channel Watch *A/B*
1) Hold until ***A/B*** flashes
2) Use channel flipper to select channel B
3) Press any button to save

Secondary Transmit on Channel B *A/B*
1) Single press to enable transmission on channel B for 10 seconds
2) Press PTT to transmit

Primary Push to Talk (PTT)

Secondary TX Beep
1) Hold PTT while powering on device to enable/disable

Primary Volume Up +

Secondary
NOAA Weather Mode
1) Hold until flashes to start scanning
- Use channel flipper to manually set channel
2) Press any button to exit

NOAA Emergency Alert Monitoring
1) Hold while powering on device to enable/disable weather alert monitoring

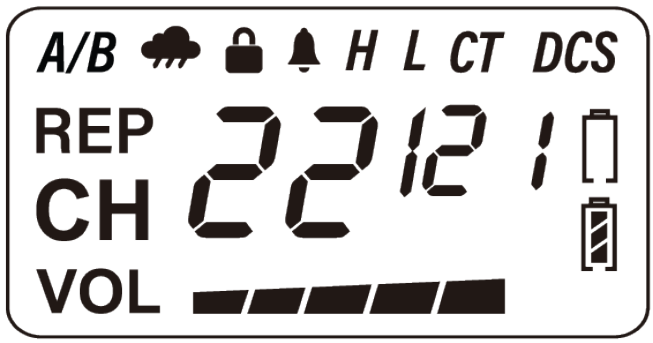
Primary Volume Down –

Secondary *CT*
Set Privacy Code
1) Hold until CT / DCS flashes
2) Use channel flipper to select code (CT, DCS)
3) Press any button to save

Enable Repeater Channel REP
1) Hold – while powering on device to enable/disable REP channels in the channel list

USB-C Charging Port
Indicator light will show red while charging and green when fully charged

Display Icons



ICON	FUNCTION DESCRIPTION
CT	Privacy code active (Analog)
DCS	Privacy code active (Digital)
CH	Channel
VOL	Volume
	TX Beep active
	Battery charge display
	Low battery indicator
	Radio lock active
A/B	Dual Channel Watch active
H	High power (4.5W)
L	Low power (0.5 W)
	Weather Mode / Alert Active
	Low signal strength
	High signal strength
REP	Repeater channel active

Technical Specifications

Radio Service	GMRS	Licensing Information
Power	5 Watts	
Range (High Power)	Line-of-sight: 35+ miles Mountains: 2 - 10 miles Forest/Hills: 1 - 6 miles City: Up to 2 miles	
Channels	22 GMRS 8 GMRS Repeater 11 NOAA Weather	
Privacy Codes	121 CTCSS/DCS	
Waterproofing	IP67 (Waterproof up to 1 meter)	
Weight	12 oz	
Radio Dimensions	10.3 x 6.2 x 3.4 cm	
Attachment System	Steel Gator Clip	
Battery	Rechargeable 1550 mAh Li-ion (3+ days battery life)	
Operating Temperature	-20° to 120° Fahrenheit	
Charging Temperature	0° to 100° Fahrenheit	
Base Functions	Privacy Codes, Channel Lock, High/Low Power Modes, Scan Mode, TX Beep	
Advanced Functions	Dual Channel Watch, Repeater Capable, NOAA Weather Alert Monitoring	
Headset Port Type	M3 (Blade Type)	
Compatible Accessories	Headset, Hand Mic, Dash Mount	

FCC Notice:

(Only Applicable for GMRS Radio Use in the United States)

Your new Radio operates on GMRS (General Mobile Radio Service) frequencies and requires an FCC (Federal Communications Commission) license. You must be licensed prior to operating the radio. Obtaining a license costs $35.00, does not require a test, and covers your immediate family. Serious penalties could result from unlicensed use of GMRS channels, in violation of FCC rules, as stipulated in the Communications Acts Sections 501 and 502 (amended).

You will be issued a call sign by the FCC which should be used for station (self) identification when using your radio. You should also cooperate by engaging in permissible transmissions only, avoiding channel interference with other GMRS users, and being prudent with the length of your transmission time.

To obtain a license or ask questions about the license application, contact the FCC at 1-888-CALL FCC or go to the FCC's website: http://www.fcc.gov and request form 605.

Obtaining a License Online:

You can obtain an FCC issued GMRS license for your family online in a matter of minutes! Here are the steps:

1. Obtain a 10-digit FRN (FCC Registered Number) from the Commision Registration System (CORES)
2. If you don't have a Username, click "Register"
3. Once you've obtained your FRN, you can apply for a GMRS License in the FCC's License Manager
4. Once logged in, you will see an option at the top of the left-hand sidebar to "Apply for a new license"
5. In the dropdown, scroll all the way to the bottom to "ZA - General Mobile Radio"
6. Simply follow the rest of the application to obtain your license!

Quick Start Guide

You just got your Radio, here are some quick steps to get you started!

1. Remove your radio and charger from the box.
2. To fully charge your radio, plug in the USB-C cable to the bottom of the radio until the indicator light turns green.
3. Press and hold the Power Button down for 2 seconds, until you hear the double beep. The current battery percentage will be displayed.
4. Unlock your radio by holding the Channel Flipper forward for 2 seconds.
5. Use the Channel Flipper to select a channel.
6. Set a privacy code to filter incoming transmissions. While this step is optional, we always recommend it! Check out the section on privacy codes linked here.
7. Match the channel and privacy code on all of your radios and test to ensure you are connected.
8. Once all of your radios are matched, remember to lock your radio by holding the Channel Flipper forward for 2 seconds to prevent any accidental adjustments.

Now you're all set to stay connected with your Rocky Talkie

Radio Range

The Radio was designed for times when maximum range is a must and/or repeater use is necessary to overcome difficult terrain. It utilizes 4.5-watts of transmission power; close to the maximum power allowed for a handheld radio.

The range of any handheld radio is highly dependent on terrain, so it is always a bit tricky to estimate the range you will experience. Big obstacles like buildings, hills, or mountains can absorb or reflect your radio waves. If you are not in “line-of-sight” with your partner, your range will be reduced. In our testing, we generally get 2 to 10 miles in the alpine. You can expect between 1 to 6 miles when in hilly and forested areas. Urban environments are the most difficult for radios to operate in, and it’s safe to expect a 1 to 2 miles max while in the city. When maintaining line of sight with your partner(s), unobstructed radio waves regularly achieve over 35 miles in our testing.

Here is a video made by our team that breaks range down in a really helpful way!

Waterproofing

The Radio was not only designed to be waterproof, but to continue to function reliably while in the wettest conditions. IP67 should handle most water sports, and the radio is designed with a fully waterproof speaker that drains quickly following submersion. The headset port and USB-C charging port are waterproof as well.

Proper care can help ensure the reliability of your radio. While completely waterproof, keeping the ports covered will prevent corrosion of the metal contacts. After using your radio in salt water, thoroughly rinse your radio to prevent excess wear.

Operating the Radio

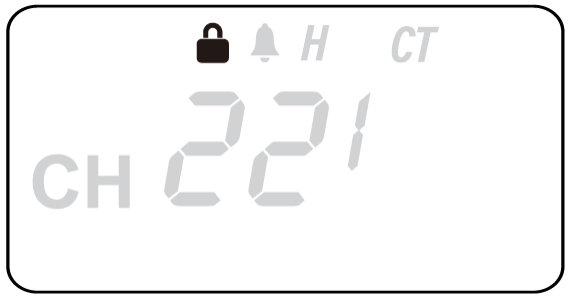
Power ON/OFF

To turn on your radio, hold the Power button down for 2 seconds. You will hear the double beep and your current battery percentage will be displayed.

Your radio will then default to the main display showing your channel, privacy code, and active settings.

LOCK/UNLOCK YOUR RADIO

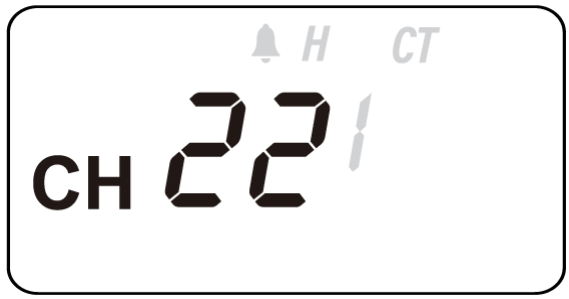
To lock your radio, hold the Channel Flipper forward again for 2 seconds. The Lock icon will reappear, indicating your radio is locked. When the radio is locked, you can still adjust the volume, swap between A/B channels, and use the PTT button.



Pro Tip: Before heading out, be sure to lock your radio to prevent accidental setting changes during your activity. (We've all be there, losing communication halfway through an adventure is not very fun!)

Select a Channel

The 5 Watt Radio has 22 channels. It can be paired with most other GMRS radios! Make sure your radio is unlocked. You can then select your channel by toggling the Channel Flipper forward or backward. Check out the Frequency Chart below for more details.



Pro Tip: Simply match the channel and privacy code to link up with most radios.

Transmit

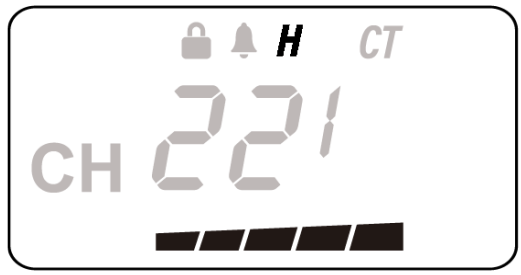
When you're ready to communicate with your adventure buddy, press the big red button on the side of the radio!

Talk into the microphone on the front face of the radio. The microphone hole is in the upper right corner of the speaker area. Hold the radio four to eight inches away from your mouth for optimal audio quality.

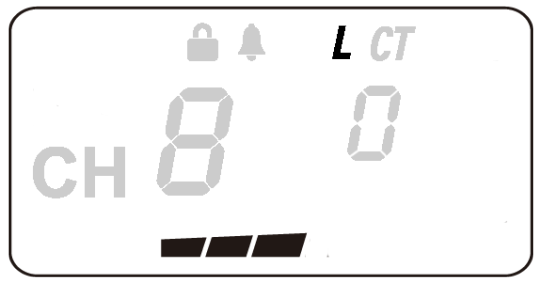
High/Low Power Channels

The transmission power of the radio will change based on the channel selected.

Channels 1-7 and 15-22 are High Power channels and utilize the full 5 Watts of transmission power. High Power channels are indicated by the ***H*** illuminated on the display. While transmitting on High Power channels, you will see 5 bars at the bottom of the screen.



Channels 8-14 are Low Power channels and are limited to 0.5 Watts by the FCC for GMRS channels. Low Power channels are indicated by the ***L*** illuminated on the display. When transmitting on Low Power channels, you will see 3 bars at the bottom of the screen.

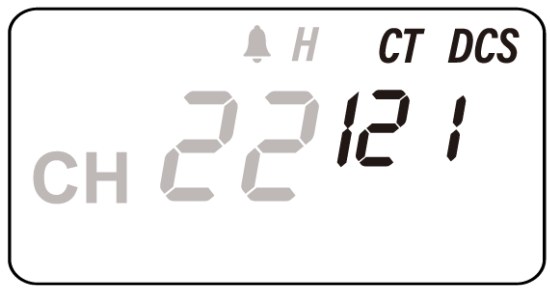


If you're having a hard time communicating on a Low Power channel, simply changing to a High Power channel might give you the extra power you need to connect!

Pro Tip: Utilize High Power channels to maximize your radio's range! Use Low Power channels to optimize battery life on longer excursions where your party is close together.

Set a Privacy Code

If you're in an area with other radio users, it may be difficult to find an open channel. This is where privacy codes come in! Privacy codes are used to filter incoming transmissions. Your radio will only allow transmissions from other radios with the same privacy code active.



Privacy codes 1 through 38 are CTCSS (Continuous Tone-Coded Squelch System) and will illuminate as ***CT*** in the upper right corner of your radio screen. Privacy codes 39 through 121 are DCS and will illuminate as ***DCS*** (Digital-Coded Squelch) in the upper right corner of your radio screen. CTCSS and DCS are very similar and, in practice, accomplish the same thing, so simply select one that gives you a free channel to communicate!

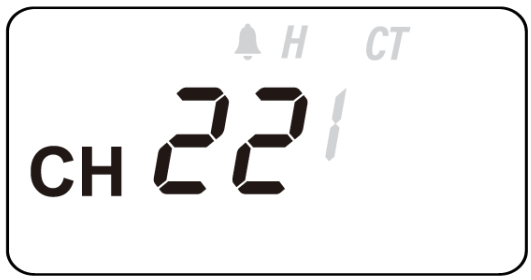
To set a privacy code:

1. Press the Volume Minus (-) button until ***CT*** or ***DCS*** flashes on the screen (about 2 seconds).
2. Use the Channel Flipper to select a code. There are 121 different privacy codes to chose from.
3. Press any button to save your selection. Remember to lock your radio to prevent any accidental changes!

If you continue to hear unwanted chatter, try a different code!

Scan Mode

Scan Mode cycles through all 22 channels until radio activity is detected. This function is useful when looking for other radio users in your area.



To activate Scan Mode:

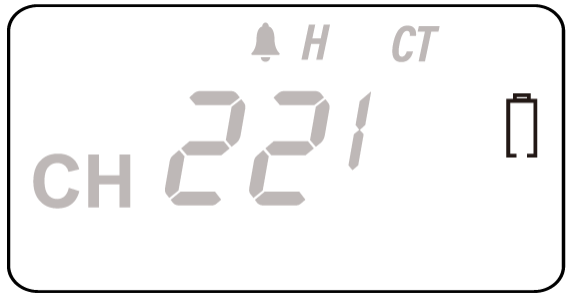
1. Unlock your radio and hold the Channel Flipper toward the back of the radio for 2 seconds. Your radio will scan all 22 channels until radio activity is detected.
2. Once a transmission is detected, the radio will pause scanning and receive on that channel.
3. After 3 seconds of inactivity, it will resume scanning.
4. To stop scanning, simply press any button.

Pro Tip: You will be able to pick up incoming transmissions and can respond if the other radio does not have a privacy code engaged.

Charge Your Radio

The 5 Watt Radio is compatible with nearly all USB-C chargers! A USB-A to USB-C charger is included with every radio, however you can use chargers from your other devices such as: phone or laptop chargers, power banks, solar chargers, etc. As long as the device is capable of outputting 5V 1A, it should be compatible.

When you see the empty battery icon on the right hand side of the screen, it's time to charge your radio!



To charge your radio:

1. Turn your radio OFF.
2. Plug the charger in to the charging port located on the right side of the radio. After plugging the radio in, a red LED will appear on the screen, indicating that the radio is still charging.

Once the radio is fully charged, the LED will turn green.

If charging while on the go, remember to make sure your radio is dry and the temperature is in a safe range to charge the battery, between 0F and 100F.

Pro Tip: When storing the radio for long periods of time, its best to charge it fully and check on the radio periodically to keep the battery above 70% charge.

Check Battery Percentage

Your current battery percentage is temporarily displayed every time you power on your radio.

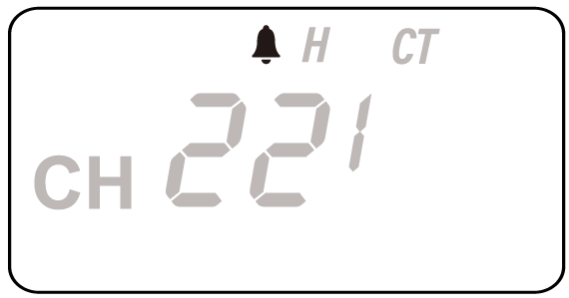
To view the battery percentage while in use, press the Power button once at any time. The remaining battery percentage will be displayed.

Below 10% battery capacity, your radio will go into Power Saving mode to protect the battery. You will be able to receive transmissions during this time but will not be able to transmit.

Pro Tip: Rather than the Radio shutting of right away when the battery hits 10%, this built-in feature allows for transmissions to still be received and can help in situations when adventures extend longer than expected and things don't go as planned.

TX Beep

The TX Beep plays a tone that confirms you fully depressed the PTT button before and after transmitting. This can be particularly helpful when wearing heavy winter gloves and can't feel the button as distinctly.



The TX Beep is set to ON by default and is represented by the Bell icon on the top row of the display. No sound will be heard on the receiving radio, this is an indicator for the transmitting radio only.

To turn off the TX Beep:

1. Start with the radio turned OFF.
2. Hold the PTT button and Power button at the same time for 2 seconds until the radio powers ON. The Bell icon will disappear. You will no longer hear the beep when you release the PTT button.

To turn the TX Beep back on, simply repeat the steps and the Bell icon will reappear on the display.

Headset/Hand Mic Compatibility

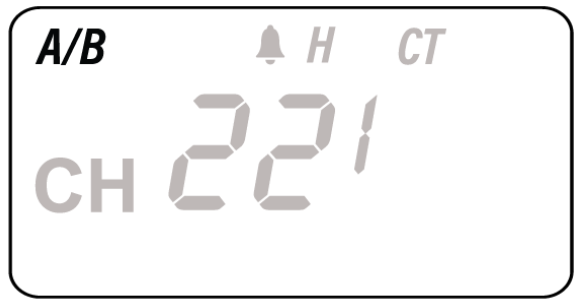
The Radio uses an M3 style waterproof connector.

Unscrew the included headset port cover. A headset or hand mic can then be screwed onto the port to make a water tight seal. Make sure to turn the screw until tight to prevent leaks.

The headset port is waterproof without the cover but it's best to keep the port cover on when accessories aren't in use to protect the contacts.

Advanced Features

Dual Channel Watch



The Dual Channel Watch mode will allow you to monitor and easily transmit on two different channels, referred to as ***A*** and ***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, or to listen in on a community channel that is reserved for safety-related or emergency communications. The Dual Channel Watch mode offers an easy way to listen and transmit on both channels without having to unlock your radio and navigate to the other channel.

To activate Dual Channel Watch mode follow these steps:

1. Unlock the radio and use the Channel Flipper to select the primary channel. This will become ***A*** when Dual Channel Watch mode is active. ***A*** can be any of the 22 channels or 8 repeater channels.
2. Hold the ***A/B*** button (located above the PTT button) down until the ***A/B*** icon flashes on the display.
3. Use the Channel Flipper to select the channel you'd like to monitor for ***B*** from the main list of 22 channels (or 8 repeater channels). Press any button to continue.
4. Set the privacy code for ***B***.
5. Press any button to save the selection.

Receiving:

While Dual Channel Watch mode is active, the display will show your ***A*** channel by default, however the radio is now continually scanning both ***A*** and ***B*** for transmissions. This will be indicated by the small ***A/B*** icon at the top of the display.

If a transmission is detected on ***B***, the radio will automatically recieve on ***B*** until the transmission is complete. It will then return to monitoring both channels.

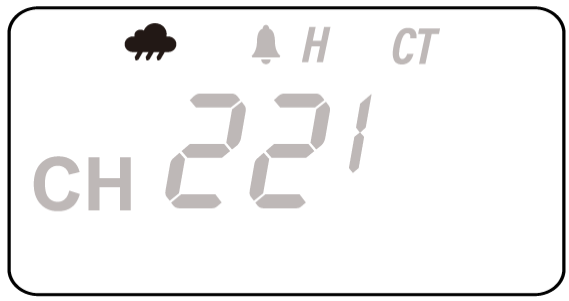
Transmitting:

While Dual Channel Watch mode is active, the transmission (PTT buttion) will default to ***A***. This helps keep community channels clear from accidental chatter and makes it easy to communicate with your main group!

To transmit on ***B***, press the ***A/B*** button once. This opens a 10 second window to transmit on ***B***. During this time the PTT button will transmit on B only. After 10 seconds of inactivtity, the PTT button will revert to ***A***.

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.

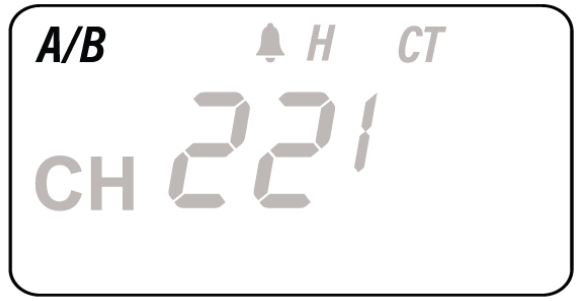


To activate Weather mode:

1. Press and hold the Volume Up (+) button on your radio until the Cloud icon flashes on your display.
2. Your radio will automatically scan for active channels in your region. When an active transmission is found, the radio will pause scanning and stay on that weather channel.
3. To stop scanning, use the Channel Flipper to manually set your desired weather channel at any time.

Receiving a transmission on your primary channels or pressing the PTT button will exit Weather mode and restore normal communications.

NOAA Weather Alert Monitoring



The Radio also includes a NOAA Emergency Weather Alert function. While this mode is active, your radio will passively monitor regional weather alerts in the background. You will be able to continue using the 22 main channels. In the event of a regional weather alert, the radio will automatically switch to the corresponding weather channel and allow you to hear the alert.

To activate NOAA Emergency Weather Alert:

1. Start with your radio powered OFF.
2. Press and hold the Volume Up (+) button while powering ON your radio.
3. The Cloud icon will appear on the display when monitoring is active.
4. If a weather alert is detected, the radio will automatically switch to weather mode on the weather channel the alert was detected on.
5. Receiving a transmissions on your primary channels or pressing the PTT button will exit Weather mode and restore normal communications.

To deactivate NOAA Emergency Weather Alert Monitoring, simply repeat the activation process, starting with the radio powered OFF.

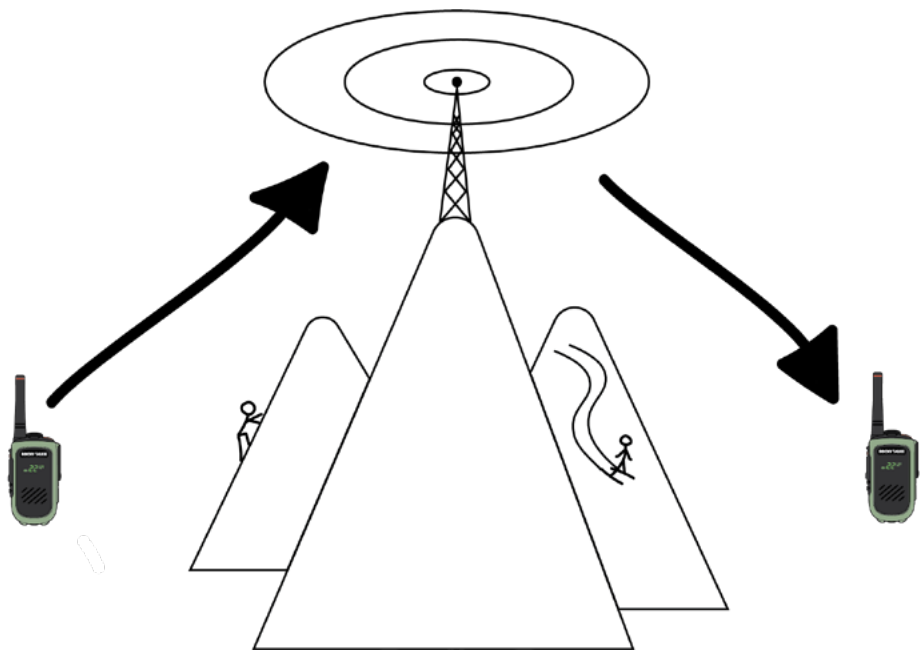
Pro-Tip: While this mode is convenient for staying on top of any weather alerts in your area, it will also consume battery roughly 25% faster while active.

To find which channels are active in your area visit the NOAA Weather Radio website!

Channel	Frequency
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

Repeater Use

One great feature of your GMRS radio is the ability to access repeaters! Repeaters take a signal and retransmit it in real time to increase the range of your transmissions. You may encounter situations where you're unable to communicate due to poor line-of-sight or obstructions in your environment. By accessing a repeater at a higher elevation, you can get around obstacles in your environment, like a mountain, and talk to people on the other side!



Repeater channels use different frequencies for transmitting and receiving. This means that if the REP icon is displayed on the screen you will only be able to communicate via repeaters in the area and not on the first 22 channels. The 5 Watt Radio comes preset with the standard GMRS repeater frequencies listed below. Check online on sites like mygmrs.com for public repeaters. You can also set up your own if there is not a repeater in your area.

Enable Repeater Channels

In addition to the 22 simplex channels on your Radio, it also has 8 repeater channels.
These 8 repeater channels are hidden from your channel list by default.

To access repeater channels, follow these steps:

1. Start with the radio OFF.
2. Press and hold the Volume Minus (***CT***) and power buttons at the same time.
3. Repeater channels are now enabled and can be seen on the channel list indicated by the **REP** icon.
4. Use the Channel Flipper to scroll past channel 22 to reach the repeater channels, indicated by the REP icon in the bottom left of the display.

Channel	RX Frequency	TX Frequency	Power
REP 15	462.5500	467.5500	5 Watt (High)
REP 16	462.5750	467.5750	5 Watt (High)
REP 17	462.6000	467.6000	5 Watt (High)
REP 18	462.6250	467.6250	5 Watt (High)
REP 19	462.6500	467.6500	5 Watt (High)
REP 20	462.6759	467.6750	5 Watt (High)
REP 21	462.7000	467.7000	5 Watt (High)
REP 22	462.7250	467.7250	0.5 Watt (Low)

Repeater Privacy Codes

Most repeaters will require you to use a privacy code to gain access. Some repeaters require two different privacy codes to be set, one for transmitting, and one for receiving. These "split tones" repeaters are common in Colorado and a few other places around the US. The Radio is compatible with split tone repeaters.

To set a privacy code for a repeater channels:

1. Navigate to a repeater channel (denoted by the **REP** icon).
2. Press and hold the Volume Minus (***CT***) button for 2 seconds.
3. The LED screen will display rE indicating for you to set the receiving frequency privacy code. Use the Channel Flipper to select the receiving code.
4. Press the PTT button to save and continue.
5. The screen will then display tr, and you can now use the channel flipper to select the transmitting privacy code.
6. Press any button to save.

Pro Tip: There is no special etiquette involved with using a GMRS repeater! Simply state your FCC issued call sign after your transmission and every 15 minutes if the conversation continues.

Connecting to Other Radios

Your radio is compatible with most GMRS radios! Pairing other radios is as easy as matching the channel and privacy code (also referred to as a sub-channel). In most cases, channels 1-22 are set to the same standardized frequencies designated by the FCC.

Please don't hesitate to reach out to us at support@rockytalkie.com if you need assistance or would like us to check radio compatibility for you!

Pro Tip: If you're having a hard time connecting with other GMRS radios, a quick look at their user manual can oftentimes reveal the solution. Simply select a channel on all of your radios that share the same frequency!

Frequency Charts

Channels 1-22

Channel	Frequency	Power
1	462.5625	5 Watt (High)
2	462.5875	5 Watt (High)
3	462.6125	5 Watt (High)
4	462.6375	5 Watt (High)
5	462.6625	5 Watt (High)
6	462.6875	5 Watt (High)
7	462.7125	5 Watt (High)
8	467.5625	0.5 Watt (Low)
9	467.5875	0.5 Watt (Low)
10	467.6125	0.5 Watt (Low)
11	467.6375	0.5 Watt (Low)
12	467.6625	0.5 Watt (Low)
13	467.6875	0.5 Watt (Low)
14	467.7125	0.5 Watt (Low)
15	462.5500	5 Watt (High)
16	462.5750	5 Watt (High)
17	462.6000	5 Watt (High)
18	462.6250	5 Watt (High)
19	462.6500	5 Watt (High)
20	462.6750	5 Watt (High)
21	462.7000	5 Watt (High)
22	462.7250	5 Watt (High)

CTCSS Privacy Codes

Privacy Code	Frequency(Hz)
Off	0.0
1	67.0
2	71.9
3	74.4
4	77
5	79.7
6	82.5
7	85.4
8	88.5
9	91.5
10	94.8
11	97.4
12	100
13	103.5
14	107.2
15	110.9
16	114.8
17	118.8
18	123
19	127.3
20	131.8
21	136.5
22	141.3
23	146.2
24	151.4
25	156.7
26	162.2
27	167.9
28	173.8
29	179.9
30	186.2
31	192.8
32	203.5
33	210.7
34	218.1
35	225.7
36	233.6
37	241.8
38	250.3

DCS Privacy Codes

Privacy Code	DCS (Octal)
39	23
40	25
41	26
42	31
43	32
44	43
45	47
46	51
47	54
48	65
49	71
50	72
51	73
52	74
53	114
54	115
55	116
56	125
57	131
58	132

Privacy Code	DCS (Octal)
59	134
60	143
61	152
62	155
63	156
64	162
65	165
66	172
67	174
68	205
69	223
70	226
71	243
72	244
73	245
74	251
75	261
76	263
77	265
78	271
79	306
80	311
81	315
82	331
83	343
84	346
85	351
86	364
87	365
88	371
89	411
90	412

Privacy Code	DCS (Octal)
91	413
92	423
93	431
94	432
95	445
96	446
97	465
98	466
99	503
100	506
101	516
102	532
103	546
104	565
105	606
106	612
107	624
108	627
109	631
110	632
111	654
112	662
113	664
114	703
115	712
116	723
117	731
118	732
119	734
120	743
121	754

Repeater Channels

Channel	RX Frequency	TX Frequency	Power
REP 15	462.5500	467.5500	5 Watt (High)
REP 16	462.5750	467.5750	5 Watt (High)
REP 17	462.6000	467.6000	5 Watt (High)
REP 18	462.6250	467.6250	5 Watt (High)
REP 19	462.6500	467.6500	5 Watt (High)
REP 20	462.6759	467.6750	5 Watt (High)
REP 21	462.7000	467.7000	5 Watt (High)
REP 22	462.7250	467.7250	0.5 Watt (Low)

NOAA Weather Channels

Channel	Frequency
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

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, and (2) This device must accept any interference received, including interference that may cause undesired operation. SAR tests are conducted using standard operating positions accepted by FCC with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. Before a new model is a available for sale to the public, it must be tested and certified to the FCC that is does not exceed the exposure limit established by the FCC. Tests for each product are performed in positions and locations as required by the FCC. For body worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with and accessory designated for this product or when used with and accessory that contains no metal. To maintain compliance with FCC RF exposure guidelines hold the transmitter and antenna at least 1 inch (2.5 centimeters) from your face with the antenna pointed up and away from your face. The equipment complies with FCC radiation exposure limits set forth for and uncontrolled environment. In order to comply with the FCC RF exposure requirement, 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 radio frequency (RF) signals when the Push-to-Talk(PTT) button is pressed. The device is authorized to operate at a duty factor not to exceed 50%.

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 diferent from that to which the receiver isc onnected.
----Consult the dealer or an experienced radio technician for help.