

# Your New (Refurbished) GMRS Radio

This radio was purchased used and was refurbished by an unpaid volunteer. The radio is being sold to you at cost and no financial profit for \$85 with a new battery and charger. Due to the radio being used, it is impractical to offer any guarantees other than they have been tested to specifications when they were sold.

You must obtain a FCC assigned GMRS license and call sign to operate this radio. You must identify with your call sign use whenever you transmit on the radio. A GMRS license and call sign are good for 10 years and cover use by all family members. A test is not required to obtain the GMRS license.

<https://www.fcc.gov/general-mobile-radio-service-gmrs>

To effectively use the radio, you'll need to practice talking on the primary repeater channel. The volunteer who sells you the radio can explain the structure of your neighborhood radio watch, and how to join the practice radio watch session one a week.

Following is a description of what the buttons on your radio do:



## AT THE TOP

Tall dial = Scroll Channels Rotate this dial to scroll through the channels.

Short dial = On/Off/Volume- Rotate to the right to turn the radio on and to raise the volume. Rotate to the left to lower the volume and turn off the radio.

## ON THE SIDE

Top button: No Function

Large, center button: PTT(Push to talk) Hold the button down to talk, let go to listen.

Bottom button: Light - Push to turn on the light, push again to turn it off.

## ON THE FRONT

S = Scan. Click for ON and click again for OFF to start and stop scanning.

A = Add or remove from the Scan List. Press to remove a channel from scanning, press again to add it.

B = No Function

C = No Function



## Charging the Battery

Your TK-380 comes with a new battery and charger—the charger is shown in the photo on the right. We recommend that you put your radio in the charger each night. You can let the radio continue to monitor stations through the night as it is charging. Then remove the radio from the charger in the morning and run it all day on the battery alone. It is good practice to have a spare battery and to switch batteries once a week.



To remove the battery from the radio: Turn the radio over. Slide the catch on the bottom of the radio with one thumb while you press against the top of the battery with the other. The battery will slide out of its holder.



In rare cases, the battery may get stuck. You can use a screw driver to release it. Remove the battery in the same way as described above, but insert the screw driver in the space between the battery and radio housing at the top of the battery. Twist the screw driver and the battery will slide out easily.

## Selecting Channels

When you receive your radio it will be programmed for your local primary repeater — Red Mule and Cobble Ridge (Fiddletown), Lockwood, Consumnes River and Oak Hill. The repeater channels are usually monitored by a “Net Controller.” When interacting on these channels, you should follow the direction of the Net Control Operator as he or she will receive and direct the traffic based upon the need at hand.

**Your Primary Repeater Channel.** Your neighborhood’s primary repeater channel is first in the list of channels and is designated with the name of your community which were listed in the paragraph above. This channel connects you with everyone in your radio net (and a little beyond). When you use this repeater channel, your transmission is received by a much more powerful radio (a repeater station) located on a ridge or tower overlooking your area. From there

it is retransmitted so that you can reach everyone who has a radio tuned to that channel that is within range of the repeater station, giving your GMRs radio a much wider area of coverage.

Usually you will be leaving your radio turned on and tuned to your primary repeater channel. You should only use your repeater station for serious events, radio testing and for the once a week practice sessions at the direction of the Net Control Operator. You should not use it for informal conversations with your neighbors, unless those conversations have to do with safety issues of general interest to the community, such as power cut-offs, loss of telephone reception, information about a wild fire, etc.

**Other Repeater Channels.** The other repeaters programmed on your radio are located outside your community. Some in your community will receive some of those repeaters and some won't. They have been added to your channel list so that you will have a way to learn what may be happening in areas nearby. You should practice the same courtesies on those repeater channels as on your own repeater channel and avoid using them for things other than their purpose.

**The Talk-Around Channels (T/A).** Each repeater channel is followed by a Talk-Around (T/A) channel. This channel allows you to talk on the same frequency as the repeater channel but without going through the repeater. In this way you can see how far your radio can broadcast without the use of the repeater. Use the T/A channels to communicate with neighbors while keeping the repeater station free from unnecessary traffic and available for emergencies.

**Extra Informal Channels.** Following the list of repeater and t/a channels are one or more extra channels that are compatible with the more-common, inexpensive radios that are popular for home use. You can use those channels for personal things, such as, when one of you is checking the circuit panel outside and the other is inside to see which lights go on and off. In general, it is best to use these informal, lo and hi power channels when talking casually with family and friends.

**What If My Hand-Held Can't Reach the Repeater?** The 4-watts of power these hand-held radios provide will usually reach the repeater when operated within the local area. However if you live on property that has a blocking hill or dense forest in the direction of the repeater, or you're traveling in terrain that has marginal coverage, you will benefit from a more powerful radio.

Refurbished mobile and/or base stations are available, programmed for your area and sold at cost. These radios have from 15 to 40 watts of power, giving you about 10 times more power than a standard hand-held radio. The cost of these radios is about \$160 each without an antenna.

For a base installation you will need to purchase coax cable and an antenna, mounting it up high on your property, usually on your roof. If a mobile radio installation is desired, it can be accomplished with a portable magnetic antenna mount or a permanent roof mount on your car. While a magnetic mount performs much better than a handheld radio operating inside a vehicle, the permanent roof mount provides superior performance.

You can contact the same volunteers who provided you with a hand-held radio and, if necessary, exchange it for part of the cost on a base station.

To request a radio, email: [radiowatch@fiddletowncc.org](mailto:radiowatch@fiddletowncc.org)



Typical 15-40 Watt Base Station with One Type of Outdoor Antenna