

Basic FRS Handheld

Pro:

- Least expensive
- Simple to use
- Often sold in packs of two to four

Con:

- Not usually ruggedly built
- Low power and limited range, typically one to two miles
- Very few features

Suggested Models, typically \$20 to \$40 for two:

- Midland T10
- Midland LXT118
- Motorola T100
- Ozark Trail Walkie Talkie (best value)

Basic FRS Handheld



Ozark Trail



Midland T10



Motorola T100

Full Feature FRS Handheld

Pro:

- Power is higher, up to maximum FCC allowable of 2 watts without any license
- Adds useful features such as Weather Band receive, squelch tones and scanning
- Batteries are usually rechargeable packs rather than disposable AA

Con:

- Antenna is still fixed
- Can be slightly more complex to use

Suggested Models, typically \$50 to 75 for two:

- Motorola T400 (best value)
- Motorola T600
- Motorola T800 (Adds Bluetooth with available phone app)
- Midland GXT500
- Midland T71

Full Feature FRS Handheld



Motorola T400



Midland GXT500

Basic GMRS Handheld

Pro:

- May add repeater capability
- Higher power up to maximum allowable of 5 watts
- Quality of transmitted and received audio tends to be improved
- Antenna may be removable to allow use of aftermarket or external antenna
- Usually intended to still work with FRS users

Con:

- Expensive and may be sold individually
- Requires a GMRS license
- Many features but can be relatively complex to configure and operate

Suggested Models, typically \$50 to \$100 for two:

- Midland GXT1000 (popular)
- Midland GXT1050
- Wouxun KG-805G
- Wouxun KG-905G (best features)
- Retevis RB27
- Baofeng GMRS-V1 (best value)

Basic GMRS Handheld



Midland GXT1050



Wouxun KG-905G



Baofeng GMRS-V1

Basic Mobile GMRS

Pro:

- Quality is generally acceptable
- Easier and safer to operate a mobile radio while moving
- No batteries or charging to worry about (hard wired to truck)
- Should work fine with FRS and basic GMRS handhelds

Con:

- Relatively expensive
- Will need a GMRS license to operate
- Mounted means it's not easy to move between vehicles
- May be narrow band only which may limit use with advanced GMRS radios
- Requires an external antenna and mount (this may be included in a package deal)

Suggested Models, generally \$50 to \$150:

- MXT115
- MXT275

Basic GMRS Mobile



Midland MXT115



Midland MXT275

Full Feature GMRS Mobile

Pro:

- Improved quality
- Higher transmitter power, often up to absolute GMRS limit of 50 watts
- Repeater capable and may be narrowband/wideband selectable
- Larger speaker with good volume and quality

Con:

- Physically larger
- Expensive
- Generally antenna and mount are not included

Suggested Models, typically between \$200 and \$400:

- Midland MXT400 (best value)
- Baofeng GMRA-50X1
- Wouxun KG-1000G (best features)

Full Feature GMRS Mobile



Midland MXT400



Wouxun KG-1000G

Suggested Radios Summary

Handheld Radios

FRS:

- Midland LXT118
- Motorola T100
- Ozark Trail Walkie Talkie
- Motorola T400

Basic GMRS:

- Midland GXT1000
- Wouxun KG-805G

Full Feature GMRS:

- Wouxun KG-905G
- Retevis RB27
- Baofeng GMRS-V1

GMRS Mobile Radios

Basic:

- Midland MXT115
- Midland MXT275

Full Feature:

- Midland MXT400
- Wouxun KG-1000G

Advanced GMRS

- Fairly common radios that carry FCC Part 95 approvals
- When these are dual approved for GMRS and commercial/business (Part 90) they may also be used for Amateur Radio
- Will require programming and configuration
 - Software is vendor specific although open source Chirp supports some brands and models
- Advantages include ability to use full bandwidth of 20KHz (called wideband) and repeaters
 - Wideband increases fidelity and range

Advanced GMRS Handheld

Pro:

- Repeater capable
- Maximum allowable power of 5 watts and bandwidth of 20KHz
- Quality of transmitted and received audio is very good
- Build quality is excellent
- Lots of accessories

Con:

- Will be relatively expensive and sold individually
- Requires software and cable and some experience to program
- Highly customizable so can be complex to configure and use

Suggested Models, typically \$50 to \$150 for one:

- Tera TR-505
- Kenwood TK-3180
- Kenwood TK-378
- Motorola Spirit

Advanced GMRS Handheld



Tera TR-505



Motorola Spirit



Kenwood TK-3180

Advanced GMRS Mobile

Pro:

- Very high quality audio and transmitted signal
- Highest transmitting power
- Extremely well built and reliable
- May have ability to separate control head from radio body to increase flexibility in mounting
- Lots of used gear, so cost can be reasonable

Con:

- Need to carry a Part 95 approval
- Requires software and cables and experience to program correctly

Suggested Models, range from \$100 used to \$400 or more new:

- Kenwood TK-8180
- Kenwood TK-880
- Motorola M1225
- Vertex-Standard VX-4207
- Vertex-Standard VX-3200
- Vertex-Standard VX-2500

Advanced GMRS Mobile



Motorola M1225



Vertex-Standard VX-3200



Kenwood TK-880