

# Radio Services

	<b>CB</b> Citizen's Band	<b>MURS</b> Multi Use Radio Service	<b>FRS</b> Family Radio Service	<b>GMRS</b> General Mobile Radio Service	<b>Ham</b> Amateur Radio
<b>FCC regulations</b>	Part 95(d)	Part 95(j)	Part 95(b)	Part 95(e)	Part 97
<b>License required</b>	by device	by device	by device	individual 18+ y.o. (covers family)	individual by exam, any age (three license levels)
<b>Repeater use</b>	no	no	no	yes	yes
<b>Channels</b>	40	5	22	30	frequency bands
<b>Emergency Channel</b>	9		20	20	varies by band & context
<b>Frequency Band</b>	11m HF (AM)	VHF (FM)	UHF (FM)	UHF (FM)	VHF/UHF/HF
<b>Max power allowed</b>	4 watts AM 12 watts SSB	2 watts	2 watts (ch. 1-7) 0.5 watts (ch. 8-14) 2 watts (ch. 15-22)	5 watts (ch. 1-7) 0.5 watts (ch. 8-14) HT only 50 watts (ch. 15-22) 50 watts (ch. 15R-22R)	1500 watts* (*varies by license and frequency)
<b>Realistic range, handheld</b>	2-10 miles	2-4 miles	1-2 miles	2-5 miles	2-15 miles
<b>Realistic range, mobile</b>	10-20 miles	n/a	n/a	5-15 miles	15-100s of miles
<b>Realistic range, base</b>	10-50 miles	n/a	n/a	15-40 miles	100-1000s of miles

Range is highly variable, depending upon terrain and surroundings.  
Don't be misled by advertised claims, that wildly overstate capabilities.

**Notes**

non-removable antenna

Tx call sign every 15 mins

Tx call sign every 10 mins

