

## GLOSSARY OF RADIO TERMS

**ARES** (Amateur Radio Emergency Service): ARES is a public-service organization of the ARRL.

**ARRL** (The American Radio Relay League): The National Association for Amateur Radio in the US. Golden Empire Amateur Radio Society (GEARS) is the local chapter.

**Band:** A band is a section of the Radio spectrum. Bands have been allocated for police, fire and ambulance services. Bands are often described by using an approximate wavelength for example the 144-148 MHz Amateur band is approximately 2 meters in wavelength so it is called the 2 meter band.

Currently:	Wide Band	25 Hertz
In 2007:	Narrow Band	12.5 Hertz
In 2013:	“Project 25”	6.25 Hertz

The RADIO determines whether you are transmitting Narrow Band, not the frequency!

**Bandwidth:** Frequency needed for particular type of emission.

**Battery Pack:** Generic term for portable power supply for radios.

Rechargeable: Ni-Cd (Nickel-Cadmium) or Ni-MH (Nickel-Metal Hydride)

Clamshell: term for the King Radio battery pack that holds 9 AA batteries

**Battery Saver:** Minimizes power consumption for extra talk-time.

**Call sign:** Sequence of letter and numbers used to identify radio operators and issued by the FCC.

**Carrier:** An unmodulated transmitted signal.

**Carrier frequency offset (Carrier Shift):** Distance between mark and space of the carrier for RTTY or similar communications.

**Channel:** Sequence of memory positions where frequency and related information is stored.

**CTCSS** (Continuous Tone Coded Squelch System): Adds a continuous sub-audible low frequency tone to the transmitted carrier. Receivers set for the same low frequency tone can decode signal. This is also known as Private Line or Channel Guard depending upon radio manufacturer. This is a simple tone system that minimizes disturbance from co-channel sharers, as only calls intended for your group are heard. This greatly reduces operator fatigue and confusion arising from irrelevant messages. The Private Line (PL) tone can be different on each channel, giving extra communications flexibility.

**DTCS** (Digital Tone Coded Squelch): A Selective call system

**DTMF** (Dual Tone Multi-Frequency): Used for transmit/receive numeric information such as phone number, PIN, remote radio control commands etc.

**Duplex:** An operation mode in which the transmit and receive frequencies are different.

**Frequency:** The number of repetitions that a wave makes per second. In Radio usage this refers to the frequency of the wave that acts as a carrier for the audio (the sound you can hear) signal. The measurement units of frequency are cycles per second, which are known as Hertz.

**Interoperability:** The ability of two or more different frequencies, bands, systems or components to exchange information and to use the information that has been exchanged.

**Memory bank:** A set of memory channels organized into a group.

**PTT:** (Push To Talk)

**Priority Channel Scan:** User-programmable Priority Channel Scan gives the radio operator the ability to program a list of channels to be scanned, from the keypad. Two channels of increased importance, for example a security and Community Repeater channel, may be designated as priority 1 and priority 2 channels within the scan list, and monitored more frequently.

**Radio Designator:** Title used while using the radio. Either issued permanently or temporarily during an assignment.

**RX** (Receive)

**Repeater Operation:** A non-audible calling tone is automatically emitted from the radio of the transmitter alerting the repeater of a call. The repeater then resends your message on a different frequency, usually at a higher power. Repeaters are usually located on tall prominent points. The term “hit the repeater” or “open the repeater” is used to signify that you have activated the repeater.

**Scan:** Continually sweeping frequencies looking for signals. The user can program a series of channels into predefined scan lists. Channels can also have priority levels assigned to them. This means that important messages can be received even if the user is engaged on another conversation.

**Simplex:** An operation mode where the transmit and receive frequency is the same.

**TOT** (Time Out Timer): Time limiting function for continued repeater or other operations.

**VFO** (Variable Frequency Oscillator): An operation mode in which operator can change frequency freely.

**VHF:** Very High Frequency includes the 144.000 - 148.000 MHz ranges. (30–300 MHz ranges signal.)

**UHF:** Ultra High Frequency includes the 430 - 450 MHz ranges.

**VOX** (Voice Operated transmission): A function that automatically puts the transmitter in transmit when the operator talks into a microphone.

**Wavelength:** The length of a wave from one crest to the next usually measured in meters. In Radio usage this refers to the wavelength of the wave that acts as a carrier for the audio (the sound you can hear) signal.