

Glossary of Two Way Radio Terms

Base Station

A Transmitter / Receiver sited in a fixed location

Lithium ion (Li-ion)

This is the battery technology used in most mobile phones. Li-ion batteries hold more energy than other batteries of the same weight. They do not suffer from the memory effect that can damage other batteries if charged incorrectly.

NiCad (Nickel Cadmium)

NiMH (Nickel Metal Hydride)

Community Repeater

A repeater base station which is shared by several separate user groups

CTCSS

Continuous Tone Controlled Squelch System. CTCSS codes are sometimes referred to as 'privacy codes' as they allow several groups of radio users to make use of the same channel without overhearing the other groups.

dB

Decibel

DTMF

Dual Tone Multi-Frequency

Duplex

Simultaneous two-way sending and receiving

ERP

Effective Radiated Power

FM

Frequency Modulation

Handie-Talkie

Became a trademark of Motorola for a hand portable radio in 1951

Hz (Hertz) -

1 cycle per second

KHz (Kilohertz)

1,000 cycles per second

Lone Worker

A safety feature that is available on some radios for those who work alone. At pre-set intervals the lone worker will receive an audible alert from his radio to press a button. By pushing the button he is letting his control centre know that he is ok. However should the user continue to ignore the audible alerts then the radio will go into Emergency Mode and alert the control centre accordingly.

Manned Based Unit

Desk mounted radio with power supply and fist or desktop microphone

Man-Down

This is a safety feature available on some radios. A tilt-switch within the radio automatically sends an alarm signal when the radio is tipped on its side for longer than the pre-set period. However, the radio will first bleep to alert the user that the alarm signal will be sent if the radio is not repositioned upright. This feature alerts the other radio users to the possibly that the lone worker may have been, for example, overcome by a sudden illness or attacked.

MHz (Megahertz)

1,000,000 cycles per second

Mobile Radio

Radio installed in a vehicle

PMR

Private Mobile Radio or Professional / Personal Mobile Radio

PTT

Press-To-Talk or (Push-To-Talk)

This is the button on the radio that is held down to make the radio transmit and then released to receive.

RF

Radio Frequency

Repeater Base Unit

Unmanned fixed base unit with external antenna providing enhanced site coverage

RX

Receive

Sellcall

Selective Calling

Semi-Duplex or **Half Duplex**

This is when you can send and receive, but only one-way at a time, as with a two-way radio. The radio user is unable to interrupt the calling party and must wait until they finish before they can reply

Simplex

A one-way communications channel as used in paging systems

STS

Sequential Tone Signalling

Squelch

Electronic circuitry that mutes the radio speaker and controls the hissing 'white noise'

Talkthrough Repeater see (Repeater Base Unit)

TETRA

Terrestrial Trunked Radio

Transceiver

A radio that transmits and receives, the term being created by combining the words 'transmitter' and 'receiver'

Two Way Radio

A term used for any radio that transmits and receives

TX

Transmit

UHF

Ultra High Frequency (400 - 470 MHz) for business radios

VHF

Very High Frequency (136 – 174MHz) for business radios

Walkie Talkie

Is another reference for Two-Way Radio although the original name referred to a back pack radio.