

Glossary of Terms for Mobile Commercial Radio

PMR (PRIVATE MOBILE RADIO) -

A system of handheld or mobile radio units communicating with each other and/or back to base station. Can integrate with other systems, including telephone networks. (This will need R.A. approval).

BASE STATION - A fixed two-way radio usually connected to an aerial mounted on the roof of a building and connected to the mains electricity supply.

HANDPORTABLE - A small handheld two way radio usually with a rubberised aerial and an internal rechargeable battery.

MOBILE - A vehicle mounted two way radio usually connected to an aerial on the vehicle roof and to the 12v or 24v vehicle battery.

CTCSS - A system of 32 sub-audible tones, of which one is selected. The user will not hear any signal the radio may receive unless the same CTCSS tone is in use on the radio that transmitted it. Thus if when arriving on a new site other users are heard then the CTCSS tone can be changed until no other users are heard.

DCS - A similar system to CTCSS described above except digital codes are used.

ENCRYPTION - A system of scrambling the voice to make it unintelligible to any radio not fitted with a similar device for descrambling.

LONE WORKER - A safety system whereby a signal is sent at intervals to the lone worker who must respond within a pre-set period otherwise an alarm is activated.

TALKTHROUGH - A facility on a base station whereby the signal received from one mobile can be retransmitted to another. Such a base station is often referred to as a repeater. Because of the extra loading that talk through causes on a shared channel, this facility has to be specially authorised by the Radio-communication Agency. (R.A.)

RANGE - The distance apart two users can be and still communicate with each other. On VHF/UHF frequencies this is essentially in a straight line along the ground. Any intervening buildings will reduce the signal and high ground can stop it completely. On the other hand if both of you are on hilltops - the range can increase dramatically. If both people were on 900 foot hills with a valley in between then they could be about 80 miles apart and communication would still be possible. For the technically minded, (on level ground) the distance to the radio horizon in miles is 1.33 x the square root of the height of the aerial above ground in feet!

'D' (miles) = 1.33 x (SQR (h ft))

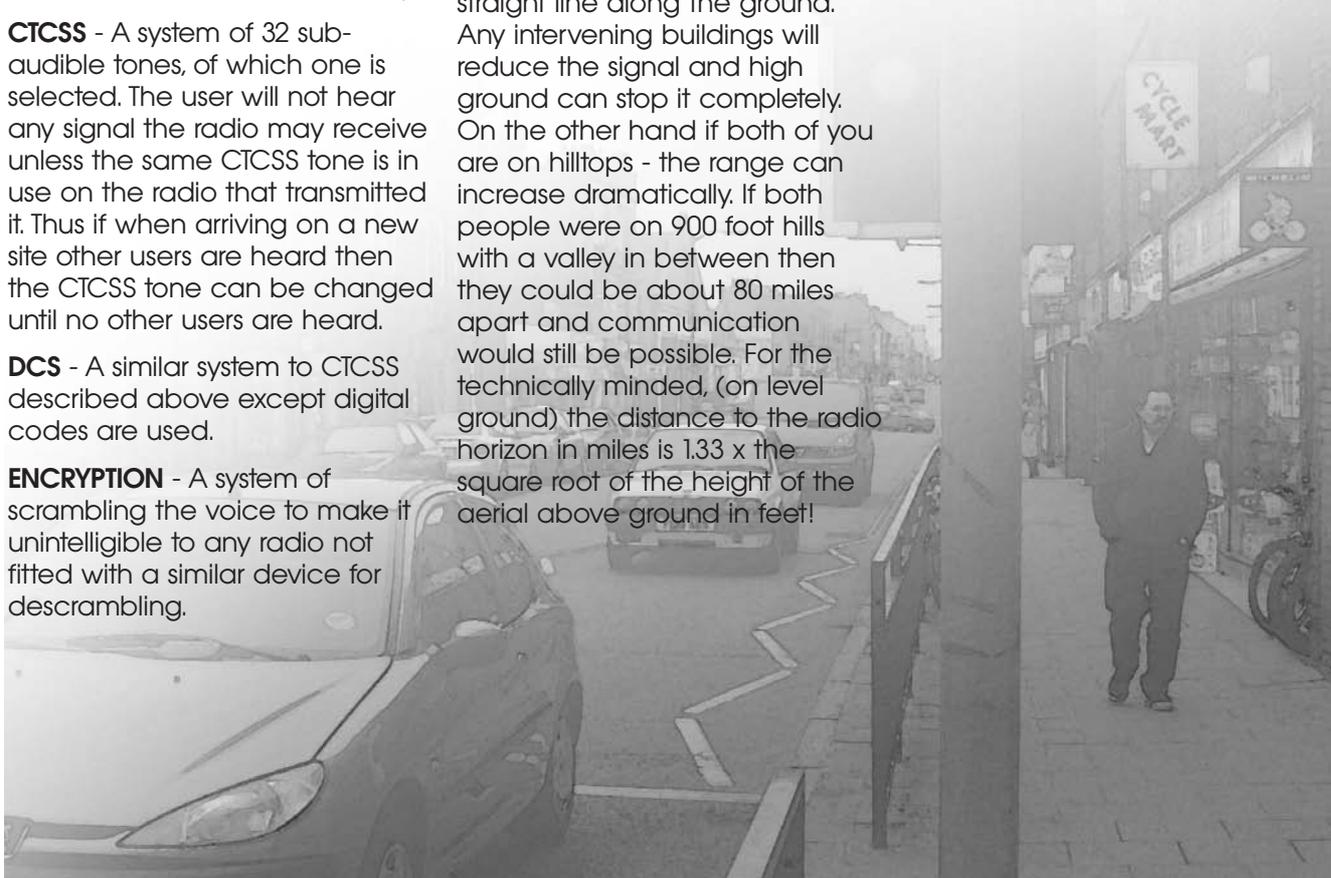
AIRTIME - The amount of time people use the radio system

LOCKED OUT - You are unable to use your radio when someone else is using the channel.

TOT - Time-out timer - sets a maximum time the unit may continuously transmit. Useful to stop congestion on shared channels and guards against transmit buttons sticking.

VOX - Voice operated transmitting - just speak - no need to press a button.

WHISPER - A facility where a person may speak in a whisper into a radio but it is transmitted as though it were spoken in a normal voice.



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