

Tech Note JAU20-16



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Use of UHF CB Radios

Introduction

UHF CB (citizen's band) radio is unique to Australia. It was introduced in the 1980s to provide an alternative to the AM 27MHz CB band in operation. UHF CB gives civilian users access to high voice quality, interference-free FM two-way radio communication on open channels. There are no individual licencing requirements or restrictions on purchase of UHF transceivers except for a maximum transmission power output of 5 watts.

There are, however, some restrictions placed on the use of UHF CB transceivers by ACMA (Australian Communications and Media Authority), particularly with regard to the use of some channels. Users must be aware of restricted channels and ensure they are used appropriately.

Channels

UHF CB radios operate within the 477MHz FM band allocated to their use. The current channel allocation for UHF CB radios is 40. The table below outlines the 40 channel allocation and their use:

Channel	Use	Channel	Use
1	Repeater output	21	General use
2	Repeater output	22	Data only
3	Repeater output	23	Data only
4	Repeater output	24	General use
5	Emergency	25	General use
6	Repeater output	26	General use
7	Repeater output	27	General use
8	Repeater output	28	General use
9	General use	29	Pacific Hwy, Bruce Hwy road channel
10	General use	30	General use
11	Calling channel	31	Repeater input
12	General use	32	Repeater input
13	General use	33	Repeater input
14	General use	34	Repeater input
15	General use	35	Emergency only
16	General use	36	Repeater input
17	General use	37	Repeater input
18	Caravan and camper convoy channel	38	Repeater input
19	General use	39	General use
20	General use	40	Road channel

Use of channels

There are several channels that are used by different user groups, for example channel 40 is the truck drivers' channel. This does not mean its use is restricted to the general public, rather it is by general agreement. There are some channels, however, whose use is restricted by law and severe penalties apply for their misuse.

The main restricted channels are the emergency channels. These are restricted for use only in genuine emergencies and must not be used for general communications. If you consider that you are in a genuine emergency, you should not hesitate to use the emergency channel. These are monitored by volunteers who may be able to assist in contacting relevant emergency or rescue organisations.

The other restricted channels are 22 and 23 and are reserved for data transmission. Many CB transceivers have these channels permanently disabled so they may not be used. If your transceiver has these channels active, they must not be used for voice communications.

Channel 11 is the calling channel and should only be used for calling another user. Once contact has been established, you must move to another channel.

Use of repeaters

There are two ways you can use a UHF CB transceiver. Simplex communication is using one transceiver to directly communicate with another providing a line-of-sight range of up to about 15km, depending on transmitting power output. The other method is by duplex communication via a repeater station.

A repeater is a relay station that extends the range of UHF transmission by up to 100km. Most repeaters are set up by community groups or business organisations, but may be used by anyone. When using a repeater, you use the duplex function on your transceiver.

Please note that many repeaters are privately owned, so the use to the public is a courtesy extended by the owners of the repeater. Repeater transmissions should be kept to the minimum time possible.

Appropriate behaviour

In the early days of CB radio, a new set of terms and abbreviations developed, for example, 10-4 (message received) what your 20 is (your location) etc. It is archaic and no-one uses it any more. If you do, you will cause yourself considerable embarrassment.

In spite of the colourful language you inevitably hear on channel 40 (and others), it is unlawful to use language that threatens, offends or otherwise causes harassment to another person. You may find rude, obnoxious or inconsiderate people on a particular channel; change channels or use the CTCSS function on your transceiver to exclude them. See your instruction manual for information on the use of CTCSS.

You may also not cause interference to TV or other radio reception.

Further information

Should you require further information about the use of UHF CB radios or other communications equipment, contact the Australian Communications and Media Authority:

www.acma.gov.au

Most retailers of CB equipment are also quite knowledgeable and should also be able to help with more information.

Although there are no individual licencing requirements, UHF CB has restrictions for use under a class licence. UHF has become the predominant citizen's band radio communication medium in Australia. It is free and provides high-quality communications for the public. Please use it responsibly to ensure it continues to remain free of cost and restrictions for all.