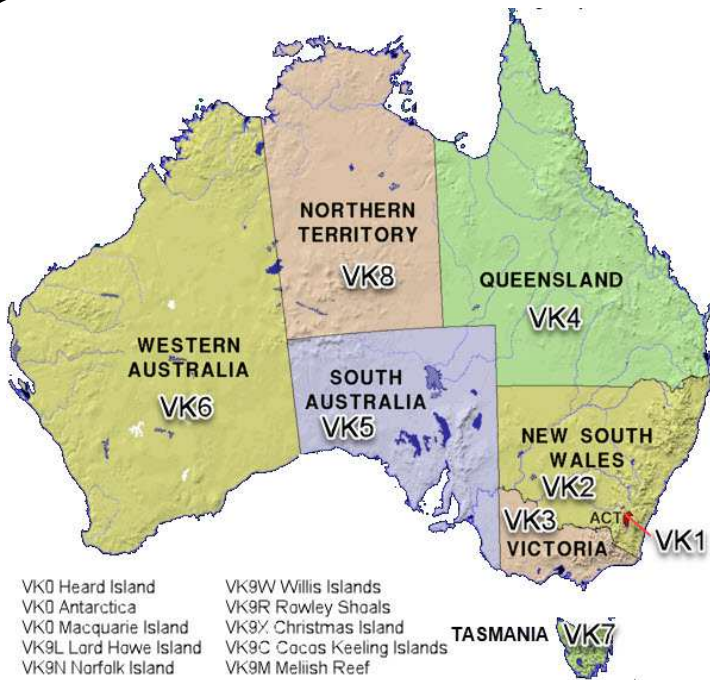


Band		Frequency	Lic	Band		Frequency	Lic	Band		Frequency	Lic
2200 metre*	S	135.7 KHz—137.8 KHz	A	6 metres*	S	50.000 MHz—52.000 MHz	A,S	6 Millimetres	P	47.000 Ghz - 47.200 Ghz	A
630 metre*	S	472.0 KHz—479.0 KHz	A	6 metres*	P	52.000 MHz—54.000 MHz	A,S	4 Millimetres	S	76.000 GHz - 77.500 GHz	A
160 metre	P	1.800 MHz—1.875 MHz	A	2 metres	P	144.000 MHz - 148.000 MHz	A,S,F	4 Millimetres	P	77.500 GHz - 78.000 GHz	A
80 metre	P	3.500 MHz—3.700 MHz	A,S,F	70 centimetres	S	430.00 MHz – 450.000 MHz	A,S,F	4 Millimetres	S	78.000 GHz - 81.000 GHz	A
80 metre*		3.776 MHz— 3.800 MHz	A	23 centimetres	S	1240.00 MHz—1300.00 MHz	A	2.5 Millimetres	S	122.250 GHz - 123.000 GHz	A
40 metre	P	7.000 MHz— 7.100 MHz	A,S,F	13 centimetre*	S	2300.00 MHz - 2302.00MHz	A	2 Millimetres	P	134.000 GHz - 136.000 GHz	A
40 metre	S	7.100 MHz— 7.300 MHz	A,S,F	13 centimetre*	S	2400.00 MHz—2450.00 MHz	A,S	2 Millimetres	S	136.000 GHz - 141.00GHz	A
30 metre	S	10.100 MHz—10.150 MHz	A	9 Centimetres	S	3.300 GHz – 3.400 GHz	A	1.25 Millimetres	S	241.000 GHz - 248.000 GHz	A
20 metre	P	14.000 MHz—14.350 MHz	A,S	9 Centimetres*	*	3.400 GHz—3.600GHz (Restricted)	A	1.25 Millimetres	P	248.000GHz - 250.000 GHz	A
17 metre	P	18.068 MHz—18.168 MHz	A	6 Centimetres*	S	5.650 GHz—5.850 GHz	A,S				
15 metre	P	21.000 MHz—21.450 MHz	A,S,F	3 Centimetres	S	10.000 GHz - 10.500 GHz	A				
12 metres	P	24.890 MHz - 24.990 MHz	A	1.25 Centimetres	P	24.000 GHz - 24.050 GHz	A				
10 metres	P	28.000 MHz— 29.700 MHz	A,S,F	1.25 Centimetres	S	24.050 GHz - 24.250 GHz	A				

* Denotes - Conditions or Restrictions apply (and/or Satellite use) and you should check the Amateur LCD for further information before using.



Australian 2m & 70cm Repeater Offsets

VHF: -600khz below 147.000 MHz
+600khz above 147.000 MHz
UHF: -5.0 Mhz

2 Metre and 70 Centimetre Band Plan (shortform)

2 Metre (VHF) - Amateur Radio is the Primary Service

144.100 MHz

Calling frequency: national primary CW/SSB

144.200 MHz

Calling frequency: national secondary CW/SSB

144.400 MHz - 144.600 MHz Beacons

144.700 MHz - 144.900 MHz DIGITAL SIMPLEX (12.5 or 25 kHz spacing)

145.075 MHz - 145.400 MHz FM AND DIGITAL SIMPLEX (25 kHz channels)

145.175 MHz

National APRS frequency

145.200 MHz

National WICEN packet frequency

145.800 MHz - 146.000MHz AMATEUR SATELLITES

146.425 MHz - 146.600MHz FM SIMPLEX (25 kHz channels)

146.500 MHz

National voice calling frequency (FM SIMPLEX)

147.400MHz - 147.600MHz FM AND DIGITAL SIMPLEX (25 kHz channels)

70 Centimetre (UHF) - Amateur Radio is the Secondary Service

432.000 MHz—432.100MHz EME

432.100 MHz

Calling frequency: national primary CW/SSB

432.200 MHz

Calling frequency: national secondary CW/SSB

432.400 MHz - 432.600 MHz Beacons

443.000MHz - 450.000 MHz ATV

435.000 MHz - 438.000 MHz AMATEUR SATELLITES

438.950 MHz - 439.775MHz FM AND DIGITAL SIMPLEX (12.5 or 25 kHz spacing)

438.950

WICEN

439.000 MHz

National FM voice calling Frequency

439.200 MHz

Digital Voice calling Frequency

Phonetic Alphabet

A	Alpha
B	Bravo
C	Charlie
D	Delta
E	Echo
F	Foxtrot
G	Golf
H	Hotel
I	India
J	Juliett
K	Kilo
L	Lima
M	Mike
O	Oscar
P	Papa
Q	Quebec
R	Romeo
S	Sierra
T	Tango
U	Uniform
V	Victor
W	Whiskey
X	X-Ray
Y	Yankee
Z	Zulu

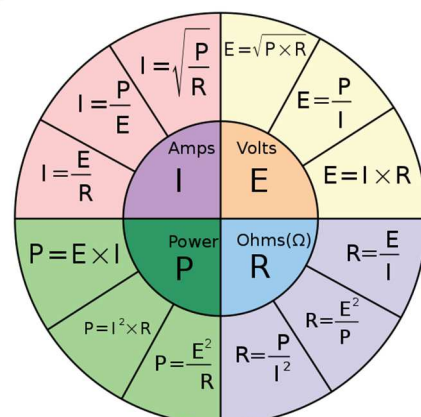
Q-Codes (informal)

QRA	Name
QRB	Distance
QRG	Frequency
QRK	Intelligibility
QRL	Busy
QRM	Interference
QRN	Noise
QRO	High power
QRP	Low power
QRQ	High speed CW
QRS	Low speed CW
QRSS	Very low speed CW
QRT	Shut down the station
QRV	Ready
QRX	Stand by
QRZ?	Who is calling me?
QSB	Fading
QSD	Defective keying
QSK	Break in
QSL	Confirmation or card to confirm contact
QSO	Radio contact
QSY	Change frequency
QTC	Message
QTH	Location
QTR	Time

DMR Information (DMR – MARC)

General Channel Information - <https://vkdmr.com/talk-groups/>
VKDMR IPSC2 Repeater Dashboard - <http://rpt.vkdmr.com/ipsc/>
VKDMR IPSC2 Hotspot Dashboard - <http://hot.vkdmr.com/ipsc/>

Commonly Used Information & Formulas



Resistors in Series	$R_{Eq} = R_1 + R_2 + R_3 + \dots R_n$
Resistors in Parallel	$\left(\frac{1}{R_{Eq}}\right) = \left(\frac{1}{R_1}\right) + \left(\frac{1}{R_2}\right) + \left(\frac{1}{R_3}\right) + \dots$
Capacitors in Series	$\left(\frac{1}{C_{Eq}}\right) = \left(\frac{1}{C_1}\right) + \left(\frac{1}{C_2}\right) + \left(\frac{1}{C_3}\right) + \dots$
Capacitors in Parallel	$C_{Eq} = C_1 + C_2 + C_3 + \dots C_n$
Inductance in Series	$L_{Eq} = L_1 + L_2 + L_3 + \dots L_n$
Inductance in Parallel	$\left(\frac{1}{L_{Eq}}\right) = \left(\frac{1}{L_1}\right) + \left(\frac{1}{L_2}\right) + \left(\frac{1}{L_3}\right) + \dots$

1/2 Wave Centre fed Dipole Antenna formulas

approx. total length in metres = $(\lambda \times 0.25) \times$ velocity factor of 0.951 (Copper wire)

1/4 Wave Vertical Groundplane Antenna Formula's

Radiating Element Length (Metres) = $(\lambda \times 0.25) \times$ velocity factor of 0.951 (Copper wire)

Radial Length (Metres) = $(\lambda \times 0.25) \times$ velocity factor of 0.951 (Copper wire)

Factors such as height above ground (Dipole), wire diameter, feedline, conductivity of the ground and nearby structures need be taken into account, so always add some extra length to trim for SWR.

Trim or Lengthen?

SWR dip Frequency is lower than you want - trim your antenna - careful not to trim too much

SWR dip Frequency is higher than you want- Get the soldering iron out and lengthen it

Common Wire Sizes

AWG	Diameter
10	2.5882mm
11	2.3048mm
12	2.0525mm
13	1.8278mm
14	1.6277mm
15	1.4495mm
16	1.2908mm
17	1.1495mm
18	1.0237mm
19	0.9116mm
20	0.8118mm
21	0.7229mm
22	0.6438mm
23	0.0226mm
24	0.0201mm
25	0.0179mm
26	0.0159mm
27	0.0142mm
28	0.0126mm
29	0.0113mm
30	0.0100mm