TECHNICAL SUPPLEMENT

Simplex DMR – VHF & UHF Cheat Sheet 20210715

VHF Digital Simplex
01 144.8000MHz VHF Digital Calling   144.8DCALL
02 144.7500MHz VHF Hi Site D-Spot   144.75DSPOT
03 144.7000MHz VHF Digital Working   144.7000sim
04 144.7125MHz VHF Digital Working   144.7125sim
05 144.7250MHz VHF Digital Working   144.7250sim
06 144.7375MHz VHF Digital Working   144.7375sim
07 144.7625MHz VHF Digital Working   144.7625sim
08 144.7750MHz VHF Digital Working   144.7750sim
09 144.7875MHz VHF Digital Working   144.7875sim
10 144.8125MHz VHF Digital Working   144.8125sim
11 144.8250MHz VHF Digital Working   144.8250sim
12 144.8375MHz VHF Digital Working   144.8375sim
13 144.8500MHz VHF Digital Working   144.8500sim
14 144.8625MHz VHF Digital Working   144.8625sim
15 144.8750MHz VHF Digital Working   144.8750sim
16 144.8875MHz VHF Digital Working   144.8875sim
17 144.9000MHz VHF TubbyHub   144.9THUB

UHF Digital Simplex
01 439.0250MHz UHF D-Spot   438.025dSPOT
02 439.0500MHz UHF D-Spot   439.050dSPOT
03 439.0750MHz UHF D-Spot   439.075dSPOT
04 439.2250MHz UHF D-Spot   439.225dSPOT
05 439.2500MHz UHF D-Spot   439.250dSPOT
06 439.0375MHz UHF DigWork   439.0375sim
07 439.0625MHz UHF DigWork   439.0625sim
08 439.0875MHz UHF DigWork   439.0875sim
09 439.1125MHz UHF DigWork   439.1125sim
10 439.1375MHz UHF DigWork   439.1375sim
11 439.1625MHz UHF DigWork   439.1625sim
12 439.1875MHz UHF DigWork   439.1875sim
13 439.2125MHz UHF DigWork   439.2125sim
14 439.2575MHz UHF DigWork   439.2575sim
15 439.2625MHz UHF DigWork   439.2625sim
16 439.2000MHz UHF DCALL   439.2DCALL

Simplex DMR point to point operations in Australia normally deploy –
12.5kHz bandwidth, Colour Code 1, Talk Group 99, Time Slot 1.

The current Wireless Institute of Australia sponsored Co-operative Band Plan specifies the following –
VHF – Digital Simplex (12.5kHz or 25kHz channel spacing) – 144.700 to 144.900MHz
    specific usage – 144.800Mhz Digital Narrowband Calling, 144.750MHz Digital High Site Hotspot
Note that the frequencies specified here permit all digital voice modes including P25, Fusion, D-Star and others.
VK DMR-MARC also specify using 145.325, 145.350, 145.375MHz for hotspots however these frequencies are mainly
used by Echolink, IRLP and AllStarLink analogue internet gateways in the region not linked to a repeater.

UHF – FM and Digital Simplex (12.5kHz or 25kHz channel spacing) – 438.950 to 439.775MHz
    specific usage – 438.950MHz WICEN, 439.000MHz National FM Voice Calling, 439.100MHz APRS,
                439.175 AX25, 439.200MHz Digital Voice Calling, 439.400MHz ARDF Beacons,
                439.125MHz Digital and Analog Gateways, 439.150MHz Digital and Analog Gateways
Note that the frequencies specified here permit all digital voice modes including P25, Fusion, D-Star and others.
VK DMR-MARC also specify using 439.125, 439.150MHz for hotspots however caution is needed to prevent interference
with already established Echolink, IRLP and AllStarLink analogue internet gateways in the region .

Simplex/Duplex DMR Example Settings

Some examples of settings for Repeater and Hotspot access are given here. There are a large number of UHF DMR
Repeaters in Australia, along with a lesser amount of VHF DMR Repeaters. The VHF example given here is for the
VK4RSA VHF DMR Repeater near Sarina Central Queensland, the UHF example given here is for the VK4TCA UHF DMR
Repeater on Brisbane Northside. The Hotspot example given here is for the portable TUBBYHUB. There are also a huge
number of Talk Groups on both the DMR-MARC and Brandmeister systems, some examples are given here however
many more can be found online.

VHF Example – Output 146.675 Input 146.025 Bandwidth 12.5kHz
UHF Example – Output 439.750 Input 434.750 Bandwidth 12.5kHz
Hotspot Example – 144.900 Simplex Bandwidth 12.5kHz

LOCAL	Color Code 1 Time Slot 2 Talk Group 9	VK DMR/Brandmeister Local Working via Repeater
StateLnkd	Color Code 1 Time Slot 2 Talk Group 8	VK DMR All State Linked Repeaters
VKAU	Color Code 1 Time Slot 2 Talk Group 505	VK DMR/Brandmeister All Australia Linked Repeaters
BMYSF	Color Code 1 Time Slot 2 Talk Group 50599	Brandmeister YSF Bridge
BMQLD	Color Code 1 Time Slot 2 Talk Group 5054	Brandmeister All VK4 Linked Repeaters
BMLocal	Color Code 1 Time Slot 2 Talk Group 1	Brandmeister Local Working via Repeater
VKNets	Color Code 1 Time Slot 1 Talk Group 5	VK DMR Nets and News
BMANZEL	Color Code 1 Time Slot 2 Talk Group 2353432	Brandmeister ANZEL News and SAREX
BMp25	Color Code 1 Time Slot 2 Talk Group 50525	Brandmeister P25 Bridge
BMWICEN	Color Code 1 Time Slot 2 Talk Group 50565	Brandmeister WICEN
BMHELP	Color Code 1 Time Slot 1 Talk Group 98	Brandmeister Hotspot Help
PARROT	Color Code 1 Time Slot 2 Talk Group 9990	VK DMR/Brandmeister Parrot Reflector for Testing
RptStat	Color Code 1 Time Slot 1 Talk Group 5000	VK DMR Local Repeater Status Report
DISC	Color Code 1 Time Slot 1 Talk Group 4000	VK DMR/Brandmeister Disconnect Last Connection

TECHNICAL SUPPLEMENT

ACC P1
Not Configured

ACC TK
Not Configured

ACC P2
Not Configured

Hytera MD782G
Front Panel Controls
TCF Revision 2

P6
Zone
Up

PWR
On/Off

Navigation

Close Menu,
Back Key &
Delete Key

Open Menu

P5
Zone
Down

P4
Short Press =
Zone Hotspot
Long Press =
Zone AnaQLD

P3
Short Press =
Talk Around
Long Press =
Day/Night Set

P2
Short Press =
SQL Set
Long Press =
MONI

P1
Short Press =
Power Set
Long Press =
P.A.

Dial
press to alternate
between Volume
and Channel Mode

TK
Short Press
= Contact List
Long Press
= Phone List