

Explanation of DMR Programming Fields

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In a DMR Repeater scenario the Radio Programming may have:

ZONES, CHANNELS, CONTACTS, SCAN GROUPS, ROAMING GROUPS, COLOUR CODES

CHANNELS

This is the Memory channels for a repeater and you will have multiple channels as each repeater has many Talkgroups available on it and so you'd likely setup one memory channel per talkgroup per repeater.

So on a usual repeater say GB7DD you may have the following memory channels in the GB7DD Zone:

- < Talkgroup 9 Local Slot 1
- < Talkgroup 9 Local Slot 2
- < Talkgroup 91 World-Wide Slot 1
- < Talkgroup 92 Europe Slot 1
- < Talkgroup 93 USA Slot 1
- < Talkgroup 9990 Echo Test Slot 1
- < Talkgroup 9990 Echo Test Slot 2

CONTACTS

This is like the address book on your mobile phone listing callsign against DMR ID so it shows a received signals callsign and name instead of just their DMR ID. This is also where you have the Talkgroups saved or Reflector Numbers.

ZONES

This is what we call a location (container/folder) that then contains all the memory channels for that repeater. For Example I would have a Zone Called "GB7DD" and when that is selected on the radio you would then have the memory channels for GB7DD that you could flip/rotate through that are available on that Zone/Repeater.

SCAN GROUPS

This is where you create for example a "GB7DD Scan" group and then add the GB7DD Memory Channels to it so when you put the radio into SCAN it will listen on these selected channels and stop when it hears a transmission and at the end of the transmission it waits a few seconds in case you wish to reply and then continues to scan. In each Memory channel you have to select the Scan Group to be allocated to it from the Scan field entry.

ROAM GROUPS

This is where when you have a number of DMR Repeaters that slightly overlap each other in coverage that you can create a ROAM GROUP adding in the memory channel from each of these repeaters. And then in each Memory channel you have to select the Roam Group to be allocated to it. Roaming is like your mobile phone the radio will be analysing the signal strengths that are

beaconed by these repeaters and automatically change you to the repeater with the best signal. The Repeaters covering the M62 are a prime example where you can sit on TG862 and drive along the M62 without having to change channel/Zone.

COLOUR CODES

A Colour Code is the digital equivalent of the analogue world's CTCSS Tones. If you program your radio with the incorrect Colour Code then the repeater will not hear you. A full list of the Colour Codes allocated to each DMR Repeater can be found on the UKRepeater Website by entering DMR in the search field. <https://ukrepeater.net/repeaterlist2.php>

The above is really just a brief outline.

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