## **DMR FAQs**

## Common Questions and brief answers:

- a. "How is this different from D-Star?" (ETSI Worldwide Standard, Multiple Vendors, TDMA, 2 voice/data channels from one repeater, more spectrum efficient, lower cost and less complicated infrastructure. DMR uses a generation newer vocoder than D-Star. Many DMR radios are firmware upgradable so the radios' performance and features are always improving.)
- b. "Can't I do the same thing with Echolink and IRLP?" (No. Those interface on analog radios)
- c. "Is this just a Motorola technology that is being pushed into the ham community?" (NO. There are multiple manufacturers: Motorola, Vertex, Kirsun, Tait, Hytera, Harris, Simoco)
- d. "Will your repeaters interfere with existing 440 analog repeaters?" (No. DMR Emission Bandwidth is 7.6 kHz. Normal UHF channel spacings are 12.5 kHz also VHF are 10 kHz)
- e. "Will your radios also support legacy analog operation?" (YES)
- f. "Where can I buy this stuff and how much does it cost?" (Ham Friendly Dealers list on DCI website, <a href="http://www.trbo.info/dci/hamfriendlydealers.html">http://www.trbo.info/dci/hamfriendlydealers.html</a>)
- g. "Where do I get programming cables and CPS software, and why can't I do front panel programming?" (Motorola Dealers, eBay suppliers, FPP is available from a 3<sup>rd</sup> Party ham)
- h. "With so many competing digital standards, which one is right for the ham world?" (Standards based with multiple manufacturers to choose from which brings down consumer cost.)
- i. "If DMR is so great, why aren't Kenwood, Yaesu, and Icom on board?" (Yaesu has announced plans to manufacture a TDMA radio on their website. Kenwood announced they will begin making DMR radios in 2013. Besides, there's far more to 2-way radio than those listed above.)
- j. "Can I select specific groups or reflectors with DMR?" (Yes, DMR has a capability to have Talk Groups which can be local, statewide, regional, national or world-wide via the IP Site Connects, cBridges and SmartPTT servers.)
- k. "Can I connect my Vertex DMR repeater into the DMR-MARC network?" (No, Vertex repeaters do not support IP Site Connect)
- I. "Can I connect my Hytera DMR repeater to a MOTOTRBO repeater network?" (No, Hytera has an IP Site protocol which is incompatible with DMR-MARC.)
- m. "How many Talk Groups and/or Channels can I have in a MOTOTRBO radio?" (Up to 1,000 Talk Group or Channels can be programmed into radios)
- n. "Why don't all stations show callsigns on the radio display?" (The DMR radios have a frequent user alias lookup that is similar to a cell phone contact list. Common callsigns can be downloaded and programmed into the radio or added manually, just like a cell phone.)
- o. **"Why do I need to get an ID assignment?"** (DMR IDs are like phone # assignments. You program it into your radio. Then, others will see you show up on their displays.)
- p. "Who do I get my ID # from?" (Go to DMR-MARC.net and "CONTACT US" on the menu)
- q. **"Who is DMR-MARC?"** (DMR-MARC is the group that is coordinating ID assignments world-wide. DMR-MARC is also the world's largest group of networked DMR repeaters.)
- r. **"Is the range on DMR equal to or better than analog?"** (We are seeing equal or better coverage with DMR compared to an analog repeater at the same location and antenna. Certainly with better quality audio when in fringe areas.)
- s. **"Is battery life really much longer with DMR?"** (Yes, battery life is increased by 40% compared to analog FM or FDMA radios. That is due to TDMA transmit and receive cycle durations being half normal power usage times. Fourteeen (14) to sixteen hours (16) of heavy usage is not unusual)
- t. "Does DMR have the R2D2 digital breakup in fringe areas?" (It is much less compared to older digital modes. DMR signal fading is minimized using CRC and FEC algorithms AND re-sync time is faster after leaving coverage. Audio quality is markedly better.)
- u. **"Is there just one network option?"** (NO. There are many DMR networks, e.g. DCI, TRBO-6, DMR-MARC, AZ-TRBONET, NC-PRN, Mi5, VK-TRBO, and other Statewide and Regional networks. Build your own and/or use all of the above)



## Join the fastest growing 2-way digital amateur radio system in the world!



DMR-MARC.NET



As of 9 MAY 2013 -160 Repeaters in 14 Countries with over 2500 users

Join our international MOTOTRBO Yahoo email discussion forum: <a href="http://groups.yahoo.com/group/mototrbo/">http://groups.yahoo.com/group/mototrbo/</a>

Please SUBSCRIBE to your Regional Networks if you are in one of these areas:

Motorola ARC (Schaumburg IL): http://gsl.net/k9mot

MI TRBO: <a href="http://cmen.us/dmr/">http://cmen.us/dmr/</a>

KS TRBO: <a href="http://www.k0usy.org/K0USY/DMR\_Network.html">http://www.k0usy.org/K0USY/DMR\_Network.html</a>
AZ TRBO: <a href="http://groups.yahoo.com/group/azham\_dmr/">http://groups.yahoo.com/group/azham\_dmr/</a>

GA TRBO: Georgia DMR@yahoogroups.com

DCI/TRBO-6: <a href="http://groups.yahoo.com/group/mototrbousa/">http://groups.yahoo.com/group/mototrbousa/</a> CA TRBO: <a href="http://w6trw.com/vhf-uhf/digital/w6trw\_mototrbo.html">http://w6trw.com/vhf-uhf/digital/w6trw\_mototrbo.html</a>

NorCal: http://norcaldigital.org/digitalsystems.html

NYC TRBO: https://www.facebook.com/groups/112582768753925/

Toronto Area: <a href="http://www.va3xpr.net/">http://www.va3xpr.net/</a>

Rocky Mountain (Colorado): <a href="http://www.rmham.org/wordpress/">http://www.rmham.org/wordpress/</a>

Denver Radio Club: http://www.w0tx.org/

Learn about the worldwide DMR standard and the many equipment manufacturers!

Technical Specs: <a href="http://dmrassociation.org/key-benefits/">http://dmrassociation.org/key-benefits/</a> Manufacturers: <a href="http://dmrassociation.org/manufacturers/">http://dmrassociation.org/manufacturers/</a>