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# DMR ETIQUETTE

## IDAHO DMR NETWORK

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### SYSTEM DESCRIPTION

#### Summary

- N7CVR DMR is an open UHF DMR Amateur Radio system, subject to the operating rules and guidelines as outlined on [n7cvr.net](http://n7cvr.net), as amended.
- Main site is on Squaw Butte in Gem County, Idaho. Picabo Mountain in the Twin Falls area and Lime Hill on the Idaho / Oregon border are in the planning stages.
- This is a C-Bridge system with connections to BrandMeister, Interstate-3 on the east coast, PNW Digital in the Northwest and the SAR-DMR Search and Rescue system across central to western Oregon. All system interconnections are subject to their guidelines and ongoing goodwill. System has battery backup and primary and secondary Internet connections with auto fail over.
- Private calls are not supported.
- APRS is not supported.
- Roaming is not currently supported.
- DMR short messages are desired and under review to implement.
- A valid DMR ID is REQUIRED and is available from [radioid.net](http://radioid.net) for licensed amateur radio operators.
- Public Safety / Emcomm / Auxcomm missions are encouraged.

### THE IMPORTANCE OF LEARNING DMR

DMR is more complex than simple analog technology which is why it is so interesting to learn and use. We do not support programming code plugs for new users but offer support to learn to program and use their DMR radios on the N7CVR DMR Network. Most of the perceived problems on DMR are due to lack of programming knowledge and operational skill and adherence to system policies.

#### The four main issues on DMR

- Inappropriate State Talk Group use. These are in-state calling talk groups but are routinely used for out-of-state and out-of-country QSO's exceeding the 10-minute limit, making them virtually unusable.
- Cross talk group conversations. These are conversations where one station is on one talk group and the other station is on another talk group and they hear each other because both stations are using so-called Digital Monitor Mode which allows simultaneous monitoring of both time slots and any talk groups. N7CVR DMR strongly discourages utilizing this mode.

- Inappropriate audio levels. Some users have very loud audio, and some have very low audio levels causing listeners to constantly turn up/down their volume to monitor stations.
- Tying up repeaters with BrandMeister talk groups 91, 93, 3100, etc. These wide area talk groups should only be accessed via HotSpots, never on a repeater.

## N7CVR DMR TALK GROUPS

Because of the complexity of the sharing agreements with other systems this document and n7cvr.net, as amended, are the only source for accurate talk groups to use on N7CVR DMR. Time Slot 1 is provisioned primarily for statewide or out-of-state use and Time Slot 2 is for local use.

### Time Slot 1 use concept

- Time Slot 1 (TS1) is designed for Idaho in state and out of state QSO's.

### Time Slot 2 use concept

- Time Slot 2 (TS2) is designed for local system use.

## ROUTINE OPERATIONS

The following is suggested initial programming. All talk groups are programmed for full time use.

### Time Slot 1 (TS1)

- 3116 Idaho Statewide
  - (a) Idaho in-state DMR calling or short QSO with 10-minute timer.
- Suggested RX Group
  - 31169 – Idaho Statewide TAC – Currently linked to BrandMeister.
    - (a) Used for longer conversations when moving from 3116.
    - (b) Out of area talk back into N7CVR DMR via BrandMeister.
  - 31419 – PNW Digital I-84 Talk Group – C-Bridge only, not connected to BrandMeister.
    - (a) Idaho / Oregon border and communication to PNW Digital coverage on I-84.
  - 31771 – PNW Digital Regional – Linked to BrandMeister
    - (a) Wide area regional use across Idaho / Oregon / Washington and BrandMeister.
    - (b) Not to be used for routine communication between the various NW DMR systems or from those systems back into N7CVR DMR. It is used for some Nets, see n7cvr.net.
  - xxxxx – Oregon SAR – DMR. Talk Group is not published but available from N7CVR.
    - (a) InterOp talk group between the Oregon SAR-DMR system and N7CVR DMR system.
      - (i) It can be used for routine traffic when Oregon Search and Rescue traffic is not active. For full repeater and talk group list, email [info@sardmr.com](mailto:info@sardmr.com).

### Time Slot 2 (TS2)

- 1100 Primary
  - (a) Main talk group for routine local traffic.
- Suggested RX Group
  - 1101 – TAC-1
    - (a) Secondary talk group for extended conversations from 1100.

- 1102 – TAC-2
  - (a) Additional talk group for extended conversations from 1100.
- 1103 – TAC-3
  - (a) Additional talk group for extended conversations from 1100.
- Local traffic only. No out of area traffic unless OpenSpot 4 Pro MMDVM is used for out of area connection back into 1100 while traveling.

## PARROT

It is vital to set subscriber radio audio to appropriate settings. Too high or too low decreases user experience. There are several ways to verify your radio is set properly.

Parrot DVR record and playback:

Time Slot 1 (TS1) – 9998 Group Call

Time Slot 2 (TS2) – 9998 Group Call

Transmit a test message ending with your callsign, pause and listen to the readback. This server is on the east coast and shared with many repeaters so be patient and try again if it doesn't work the first time. Be sure to pause 2-5 seconds before transmitting your test message to make sure it is recorded.

PNW Digital audio level: <https://pnwdigital.net/audio-alq/>

[W7NCX Audio Levels](#)

[W7NCX Audio Levels](#)

**Make setting your audio correctly a priority.**

## IDAHO STATEWIDE 3116

Effective with this distribution Idaho Statewide 3116 has been disconnected from BrandMeister. As stated above, the concept of statewide talk groups was to have in-state talk groups as calling channels and then move to in-state TAC channels for longer conversations. This is not how they are used so essentially are not used as in-state talk groups.

The Idaho DMR Network has moved to the Texas model. Texas 3148 is a C-Bridge only talk group shared among the various C-Bridge owners in Texas for in-state DMR use. 3148 cannot be accessed via BrandMeister repeaters or HotSpots or from outside of Texas. Users must be within Texas on a Texas DMR repeater connected to one of the Texas C-Bridges that carry 3148. BrandMeister 3148 is not connected to Texas C-Bridge 3148.

With this change Idaho 3116 Idaho Statewide will move from part time to full time access but will only be available to repeaters in Idaho that are connected to the Idaho DMR Network C-Bridge. This will restore the concept of statewide DMR use within the State of Idaho.

## IDAHO STATEWIDE XXXXX

This is a new Idaho Statewide PTT (part time) talk group that is connected to BrandMeister. This is a work around to maintain access to BrandMeister 3116 Idaho Statewide, bypassing the current problems with 3116. This is a part time only talk group with 10-minute timer and requires moving to Idaho TAC 31169 for longer in-state conversations. This talk group is not published but can be utilized if out of state 3116 traffic connected to BrandMeister is necessary. Contact n7cwr@pm.

# IDAHO STATEWIDE USE

As DMR grows in Idaho, new repeaters that desire to support Idaho Statewide 3116 should request connection to the Idaho DMR Network C-Bridge instead of BrandMeister.

The result will be a DMR network across Idaho that supports DMR use within the state without interference from out of state stations, thereby promoting Idaho Statewide 3116 within the state.

## TAC CHANNELS

BrandMeister has several so-called TAC talk groups. 310-319 are used for longer conversations when stations move off nationwide or worldwide talk groups. Idaho DMR Network does not support these BM talk groups. BM says 310-312 support cross platform bridging from them to C-Bridges, but few C-Bridges support these BM talk groups on their C-Bridges. Idaho DMR Network does not.

Idaho DMR Network now supports 313-319 C-Bridge talk groups on Time Slot 1 (TS1) that are not connected to BrandMeister. These are PTT only talk groups with 15-minute timers with a hold-off of 15 minutes. These are good talk groups to have skeds with others around the country who are within range of a DMR C-Bridge that supports these talk groups. PNW Digital and SAR-DMR do not support these talk groups. Interstate-3 on the east coast does. These are all available on Time Slot 1 (TS1).



Logo courtesy of PNW Digital

N7CVR DMR provides support for OpenSpot 4 Pro for the purpose of getting back into N7CVR DMR when out of the coverage areas of the N7CVR DMR system. A procedure including available talk groups is available upon request to set up the device for remote access to the system.

N7CVR DMR is a network of repeaters with the OpenSpot 4 Pro as an adjunct to the system. It is possible to set up multiple profiles to use N7CVR DMR and BrandMeister with the OpenSpot 4 Pro but that is beyond the scope of this document.

## SUMMARY

The intent of N7CVR DMR and the Idaho DMR C-Bridge Network is to promote DMR within the State of Idaho. There are numerous ways to set up DMR radios and this document is a starting place for users of N7CVR DMR. Utilizing RX Groups and Scan Lists can improve the usability of this system immensely. Be certain to program the channels in RX Groups so you can switch and transmit on those channels when you hear a station on them.

As the network grows in sites and cooperative connections to other C-Bridge networks, it is hoped users will enjoy DMR even more.

n7cvr@pm.me

Idaho DMR C-Bridge Network

## OPERATING ETIQUETTE (courtesy of BrandMeister)

General Guidelines in operating on the BrandMeister Network

BrandMeister is a worldwide platform allowing Repeaters, Hotspots and other applications to centrally connect and communicate in real-time for amateur radio operators.

These are some general tips/guidance on how to navigate and operate on the network.

1. **Be courteous and respectful** to fellow amateur radio operators while communication on the network.
2. **Be mindful of your language** and know there can be many ears listening, even young ones.
3. **Listen and Pause...** allow space between your conversations to allow others to join into the conversation and to allow hotspots or repeaters to disconnect from a talk group. A good practice is between 2 and 5 seconds.
4. **Minimize highly charged conversations** such as politics and religions. Some talk groups might be more open to politics and religions but would recommend listening and practicing common sense when talking about highly charged topics.
5. **Move to a TAC or Local Talk Group** when using a busy or high profile talk group. Be mindful of your communication time and suggest to move to a TAC or Local talk group if the conversation is going to go long.
6. **Be Mindful of the Talk Group Label** as this will suggest the topic or region it was designated for. Some are meant to be used for a region and when outside stations utilize the talk group be mindful and respective of its usage and time. For example , there should be no instances of two or more outside stations use a talk group designated for another region.
7. **Statewide Talk Groups** generally in the USA are meant to be calling channels and or short conversations and should move to a local TAC channel when possible. Generally a 10 minute rule exists before some monitoring might join your conversation to politely ask you to move to another talk group. Be mindful these statewide talk groups might be set static on a large number of repeaters statewide. Nets are acceptable on state wide talk groups.