



Station Coordination Proposal Instructions

Revised: February 19, 2016

C

- 1) Club/Sponsor:** The club or sponsor name for station listing. 10 characters maximum.
- 2) Web Page URL for directory:** The Uniform Resource Locator (URL) for the club or sponsor's web page.
- 3) Holder of Coordination:** The individual or entity responsible for the operation of the station.
- 4) Sponsor:** The name and contact information for the individual or entity sponsoring the station.
- 5) Primary Contact:** The name and contact information for the person whom WAR, Inc. will correspond with.
- 6) Notes to the Coordinator:** You may enter any notes regarding the coordination which might be helpful.
- 7) Signed:** Enter your signature or that of the person responsible for the coordination.
- 8) Date:** Enter the date the form was filled out.

C

CONTACT
Information Form

S

STATION
Coordination Form

Who should use these forms? Individuals or entities (such as a club) seeking a new frequency coordination or modifying a current coordination. We require the "C" contact form be filled out which captures all of your contact data. The "S" station form is used to capture the technical data of the various receivers, transmitters, antenna, locations, etc. of your system. Notice we no longer use the term "repeater" coordination; rather we now look at your installation as a "station" which requires coordination. If you represent a system and only the contact information has changed, i.e. email addresses, phone numbers, mailing addresses, and no technical details have changed, you only need to submit the "C" contact form. Membership to WAR Inc. is no longer handled through the coordination process. Please refer to the www.wi-repeaters.org web site for membership information.

There are 2 forms, which one do I use? Perhaps both, and perhaps multiple copies of the "S" station form. A station may include a Repeater, an Aux Repeater (remote receive site), Aux Link Receiver, Control Receiver, Point-to-Point Link or Remote Base. All previous coordination proposal forms have been replaced by the "C" contact, and "S" station forms.

S

- 1) Reason for Coordination:** Select "New" for coordination at a new location; select "Modify" to propose changes regarding a previously coordinated station. For example, changes which affect service area, like; antenna height, effective radiated power, changes in modulation or occupied bandwidth, or methods of access such as selective access (CTCSS, CDCSS, etc.). These changes will be considered by the coordinator relative to any prior recommendations. The coordinator will assess any potential impact the changes may have on other incumbent operations.
- 2) Station Type:** Select "Repeater" ; "Aux Repeater (remote receiver)" ; "Aux Link Receiver" ; "Control Receiver" ; "Point-to-Point Link" ; or "Remote Base." A "Repeater" is most commonly defined as a device which receives and simultaneously re-transmits a signal, often on the same band, and from the same location. There are additional station types which are similar, but have unique characteristics. An "Aux Repeater" is commonly called a "remote receive site" which includes a receiver, often on the same input frequency of a "Repeater" station, but with the same or different selective access type, and a transmitter on a different band which is received on a "Aux Link Receiver" located at the Repeater site. A "Control Receiver" is on a different band than a Repeater for instance, and is used to allow a control operator to make modifications to a controller, such as turning functions on or off. The "Point-to-Point Link" is often used to link one or many Repeater stations together, increasing the coverage area of a system. Finally, the "Remote Base" is a form of auxiliary station and often includes a point-to-point link, such as a mobile rig placed in the "cross-band" mode. This application is usually temporary, however if a permanent application of a Remote Base is employed, coordination of frequencies is required.
- 3) Transmitter Callsign:** Enter the callsign of the station's transmitter.
- 4) Holder of Coordination:** Enter the name or callsign of the station's Holder of Coordination from the "C" form. This is used to associate the pages of a submission with each other should they become separated.

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Location Information: You have many tools available to accurately locate your station. WAR Inc. requires you to provide latitude and longitude data in the DD MM SS format.

- One of the most commonly available methods of finding your station location is the use of Google Earth. Be sure to set the coordinate measuring display to degrees, minutes, seconds of latitude and longitude. You can find this under “options” on the “3D View” tab.
- If you choose to use a tower’s FCC ASR#, be sure the data is recorded in the NAD83 datum.
- You may need to convert DD.ddddd or DD MM.mmmm to DD MM SS. Online conversion tools are available which will help you make the conversion.

Location Information: TRANSMITTER RECEIVER The form allows for information to be provided for both the transmitter and the receiver. If the station you are proposing is at the same location, and/or uses the same antenna, you should enter your data in the left column, under TRANSMITTER only. If however your station is located at different sites, or perhaps has separate antennas at the same site, enter the data for each.

5) Latitude: Whole numbers only in degrees, minutes and seconds. DD MM SS No decimals.

6) Longitude: Whole numbers only in degrees, minutes and seconds. DD MM SS No decimals.

7) Base Ground Elevation (AMSL): The ground elevation upon which the antenna support structure rests.

8) City: Enter the name of the city nearest the station.

9) Site Address / ASR#: The address of the site and/or the tower’s FCC ASR#(s).

10) Facility or Site Name: Site reference such as “QTH of ‘callsign” or “Village of Hamville Water Tower.”

11) County: Enter the county where the station is located.

12) Region: Enter the region where the transmitter and receiver is located. Use the table below to select the correct region for the county associated with the transmitter and receiver.

North Central: Vilas, Forest, Florence, Onieda, Lincoln, Langlade, Taylor, Marathon, Shawno, Menominee, Clark, Wood, Portage, Waupaca.

North East: Marinette, Oconto, Door, Kewaunee, Outagamie, Brown, Manitowoc, Winnebago, Calumet, Fond du Lac, Sheboygan.

North West: Douglas, Bayfield, Ashland, Iron, Burnett, Washburn, Sawyer, Price, Polk, Barron, Rusk, St. Croix, Dunn, Chippewa, Pierce, Pepin, Eau Claire.

South Central: Juneau, Adams, Waushara, Marquette, Green Lake, Sauk, Columbia, Dodge, Iowa, Dane, Jefferson, Lafayette, Green, Rock, Walworth.

South East: Washington, Ozaukee, Waukesha, Milwaukee, Racine, Kenosha.

South West: Buffalo, Trempealeau, Jackson, La Crosse, Monroe, Vernon, Richland, Crawford, Grant.

13) Band: Use the drop down list provided.

14) Frequency: If this is a modification to an already coordinated station, enter the frequency of the transmitter and receiver in MHz. If this is a request for a new coordination, leave these fields blank. If the frequencies supplied here are not suitable for the proposal, no further action will be taken on your request. If you have a technical basis for requesting a specific channel or channels, such as other transmitter and receiver frequencies of concern or similar technical factors, the coordinator can consider isolation factors and/or inter-modulation products as part of making a recommendation. Feel free to include a separate cover letter to explain any special circumstances you’d like to have considered and we’ll do our best to help.

15) Emission Designator: The primary and secondary emission designator for this station. If your station only has one emission modality, select the primary only. If your station is capable of two modalities, select both the primary and secondary.

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16 & 17) TX & RX Tone/Code Type: The primary and secondary TX & RX tone or code type.

18 & 19) TX & RX Tone/Code: The primary and secondary TX & RX tone or code.

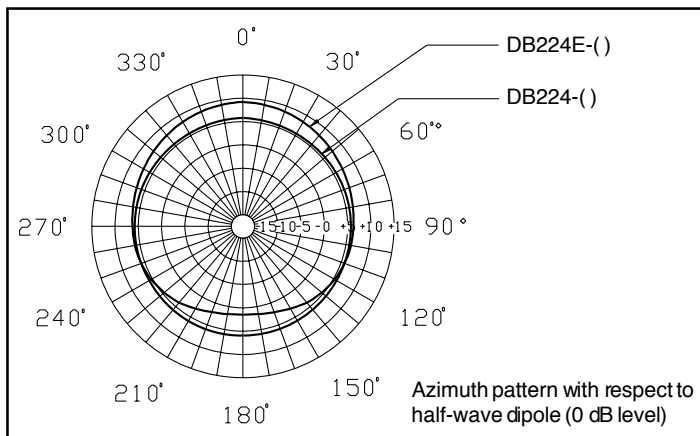
Selective Access Plan - Wisconsin - April 20, 2015

Wisconsin has been divided into 6 tone regions. This chart lists recommend selective access codes adopted by WAR, Inc. For more information, please consult <http://www.wi-repaters.org> web.

Region	CTCSS ¹	CTCSS ²	CDCSS ¹	P25 ¹	P25 ²	DMR	NXDN/ Yaesu ¹	NXDN/ Yaesu ²
North West	110.9	91.5	351	\$455	\$393	CC 4	30	24
North Central	114.8	88.5	664	\$47C	\$375	CC 5	31	23
South West	131.8	71.9	261	\$526	\$2CF	CC 7	35	17
South Central	123.0	82.5	632	\$4CE	\$339	CC 8	33	21
North East	146.2	85.4	265	\$5B6	\$356	CC 6	38	22
South East	127.3	79.7	431	\$4F9	\$31D	CC 9	34	20

Footnote: 1) indicates preferred selective access for area. 2) indicates an alternate selective access.

20) Antenna Radiation Pattern: Select the transmitter and receiver antenna type.



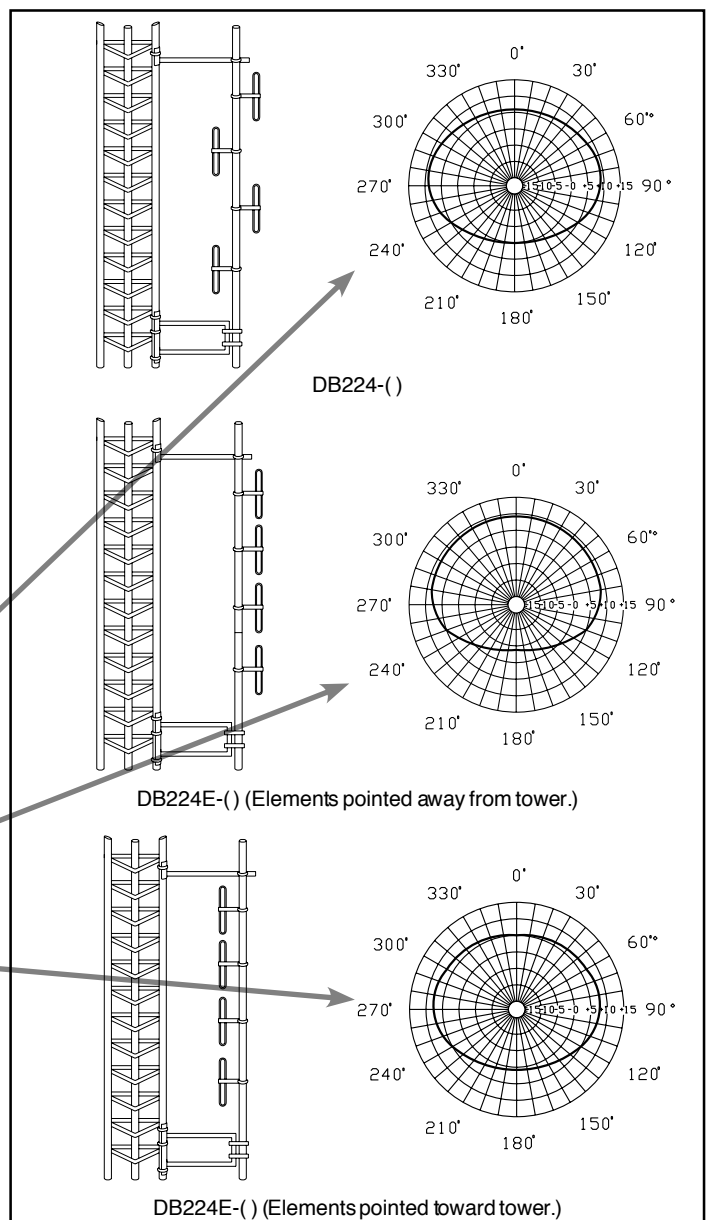
Omni-directional - top mounted: The example above shows an Andrew® DB-224E VHF antenna top mounted to the tower with all four loops mounted in each of the 4 quadrants.

Omni-directional - side mounted: The example shows the radiation pattern when all four loops are mounted in each of the 4 quadrants, and is side mounted.

Unidirectional/Cardioid: The example shows the radiation pattern when all four loops are mounted in a single plane and all pointed away from the tower.

Bidirectional/Elliptical: The example shows the radiation pattern when all four loops are mounted in a single plane and all pointed toward the tower.

Best Practices: Be sure to consult with your antenna manufacturer for radiation pattern data. List the antenna make and model (27), indicate the antenna polarization (28), and select the radiation pattern type (29). 0° indicates North, 90° indicates East, 180° indicates South, and 270° indicates West.



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21) Antenna polarization: Select the transmitter and receiver antenna polarization.

22) Major Lobe Axis (Bearing): Enter the bearing of the transmit and receive antenna(s). The number entered must be between 1° and 360° where 360° is North.

23) Antenna Height Above Ground Level: Enter the transmitter and receivers antenna(s) height above ground level in feet. You do not need to submit any additional data or calculations.

24) Maximum Antenna gain at Horizon: Enter the transmitter and receivers antenna(s) gain in dBd.

dBd: is gain relative to a dipole. **dBi:** is gain relative to an isotropic radiator. Most commercial antennas specify gain relative to a dipole, most products marketed to the amateur community are specified relative to an isotropic radiator (dBi). Any manufacturers' data sheet which simply provides gain using a meaningless "dB" reference should be assumed to be referring to dBi or something even more optimistic than that. $\text{dBd} = \text{dBi} - 2.14$.

25) Transmitter Power Output: Enter the transmitter's power output in watts. The number you enter is part of a calculated field (Line 27: ERP watts) on the form.

26) Antenna System Losses (dB): Enter the transmitter and receiver system losses in dB due to transmission line, duplexer, patch cables, connectors, etc. The number entered must be positive. (example: 3.25)

27) Effective Radiated Power: The form does the calculations for you.

28) -3dB Beamwidth: Enter the transmitter and receiver -3dB beamwidth for directional style antennas.

29) F/B Ratio (dB): Enter the transmitter and receiver antennas' front to back ratio for directional style antennas.

30) Antenna Make/Model: Enter the transmitter and receiver antennas' make and model information.

31) Operating Parameters and Special Features: Check those that apply.

Print the form and mail it to the address provided. If you have further information regarding your coordination, submit it along with the printed form. PLEASE DO NOT STAPLE.

Membership: If you'd like to become a member of WAR, Inc., see our website: www.wi-repeaters.org for further information.