

Wide-Coverage Internet Repeater Enhancement System

As implemented by the Hibbing, MN Repeater

The repeater is operating in AMS mode Automatic Mode Selection

- Repeater is either tadeonal FM analog, or Yaesu C4FM Digital
- The mode is determined by the mode of the last received signal
- The repeater operates with a "split personality"
 Digital users can not hear the analog transmissions
 - Analog users can hear the digital transmissions

- UNLESS –

User's Fusion Radio is in AMS

FM User's Radio uses CTCS or Tone Squelch

Make use of the node Local Area WIRES-X Nodes

Location	Call	Node ID	Room ID
Two Harbors	NOMR	11570	21570
Knife River	KCOMKS	11388	21388
Brainerd	WOUJ	11473	21473
Brainerd	WOUJ	11554	21554
Hibbing ²	NOAGX	35475	NA
Ely1	WOPHX	18272	28272
Superior	WA9KLM	18373	28373
Duluth*	NOEO	30494	40494

- 1 Analog only
- 2 Digital only
- * Arrowhead Skywarn Response Team

Local node will announce its status every 60 minutes.

Make use of the node

Known Active Remote WIRES-X Nodes

Location	Call	Node ID	Room ID
Phoenix, AZ	AE7JG	11452	
Lino Lakes, MN	AD0MI	11493	
Test Node			21310
The-DARC-Room			28439

Local **node** will announce its status every 60 minutes.

WIRES-X Listening Tips

- The system can be linked to other repeaters or users by joining a room.
- The user may be unaware of being in a room

- UNLESS —

- > A room member is transmitting
- > WIRES-X is enabled on your radio
- > You listen to the repeater's analog ID

WIRES-X Transmitting Tips

- If using AMS mode and operating digital, be aware that the repeater ID given every hour on the half-hour or a user may drop you out of digital mode – breaking your QSO
- There is a three (3) minute transmit timer while in a room
- Allow sufficient time between transmissions to compensate for internet lag – about 15 seconds.
- Loss of internet connection while WIRES-X is active is not uncommon. An indication of the quality of service (QSQ) is provided by the repeater ID when the repeater is in a room and QSQ is poor.

Node Courtesy

- Digital and analog modes do not play well together on WIRES-X nodes. Limit use of our WIRES-X node to digital nodes only.
- Analog and digital users share the repeater. Respect each other's use by confirming the repeater is not in use before starting to transmit.

NØAGX WIRES-X Node Schedule

- Node is being monitored
- If active, the system and node will ID every 60 minutes
- Digital mode on +147.120 MHz (NØAGX Hibbing Repeater)
- 24/7 Operation *
 - Connected to The-DARC-Room 5 AM 10PM
 - Open for visiting other rooms from 10 PM 5 AM
- Limit key down time to less than 3 minutes
- Inform NØAGX, control operator, of any issues