



# An Intro to AllStar Link

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# What is AllStar Link

A way to link repeaters, single radios and radioless nodes via the Internet using Voice Over IP (VOIP) and the Asterisk PBX software on Linux

AllStarLink has 22,147 users and 19,451 nodes world-wide

Completely Free and Open Source

Provides complete repeater control

Can interface with Echolink, D-Star, C4FM, P25 and other service bridges

Can interface with SIP Phone, Smart Phone or Computer using VOIP

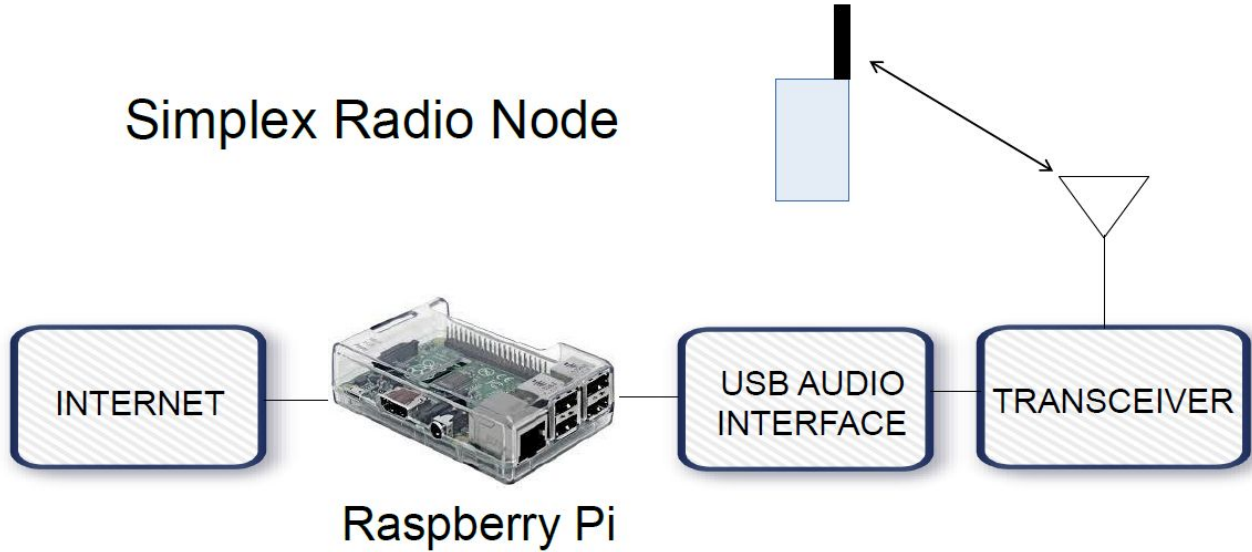


# What is Needed for an AllStar Simplex Node

- UHF/VHF Radio
- Radio Audio/Control Interface
- Linux Based Computer running the AllStar software
- Internet connection for linking radios



# Simplex Radio Node



# ClearNode by Node-Ventures



# SHARI by hamprojects.info



# Allstar Radio-Less Node Adapter by Allstarnodes.com





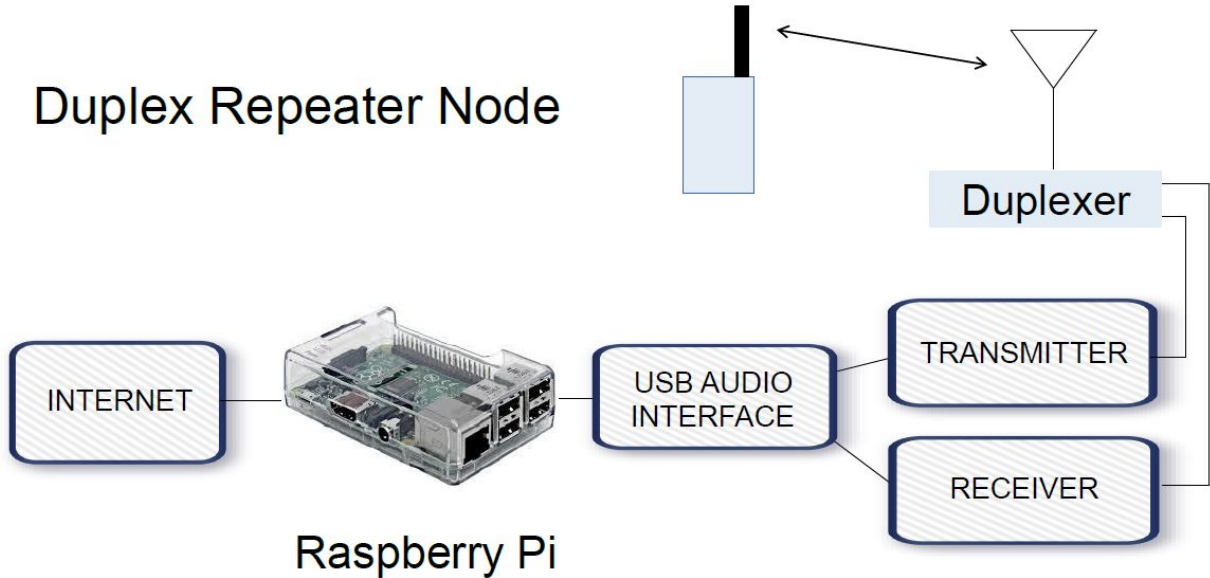
# What is Needed for an AllStar Repeater Node

- UHF/VHF Radio for Transmit
- UHF/VHF Radio for Recieve
- Duplexer
- Radio Audio/Control Interface
- Linux Based Computer running the AllStar software
- Internet connection for linking radios

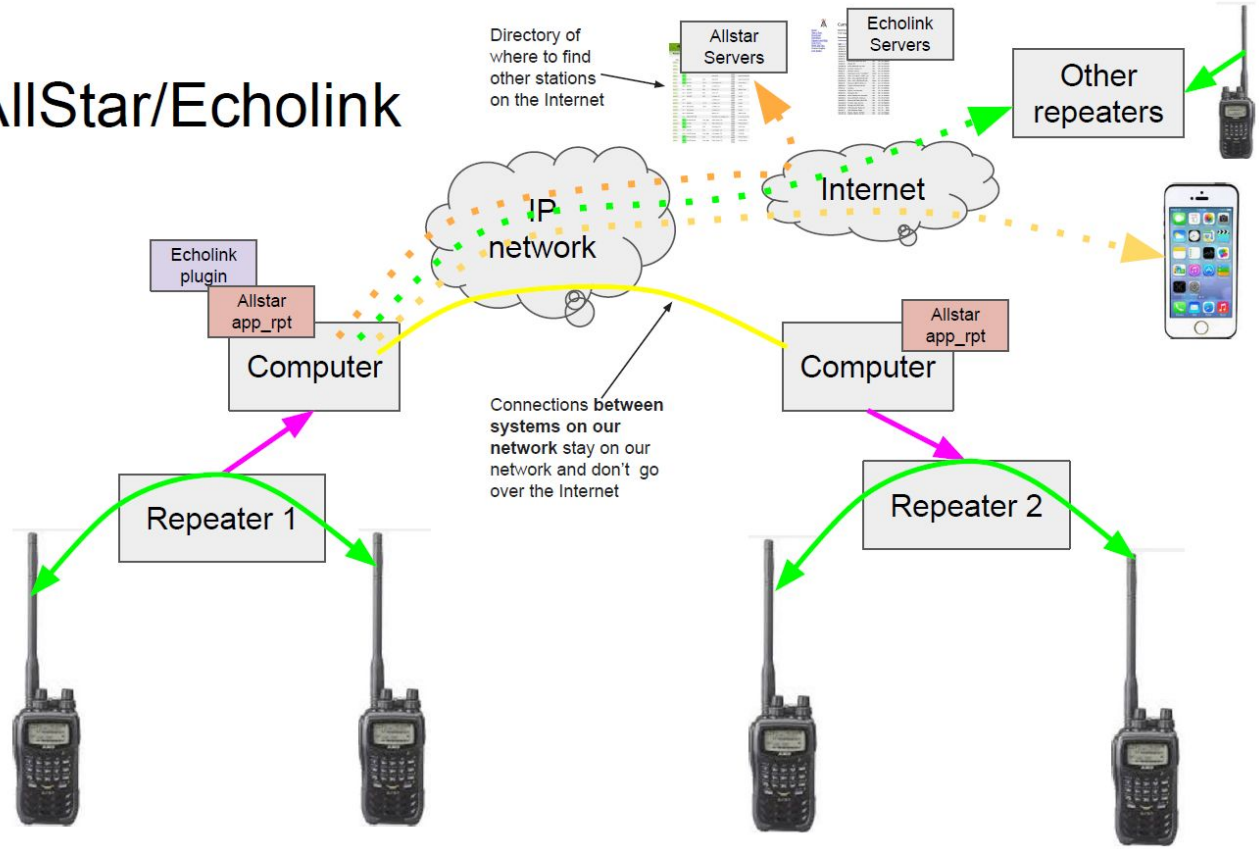




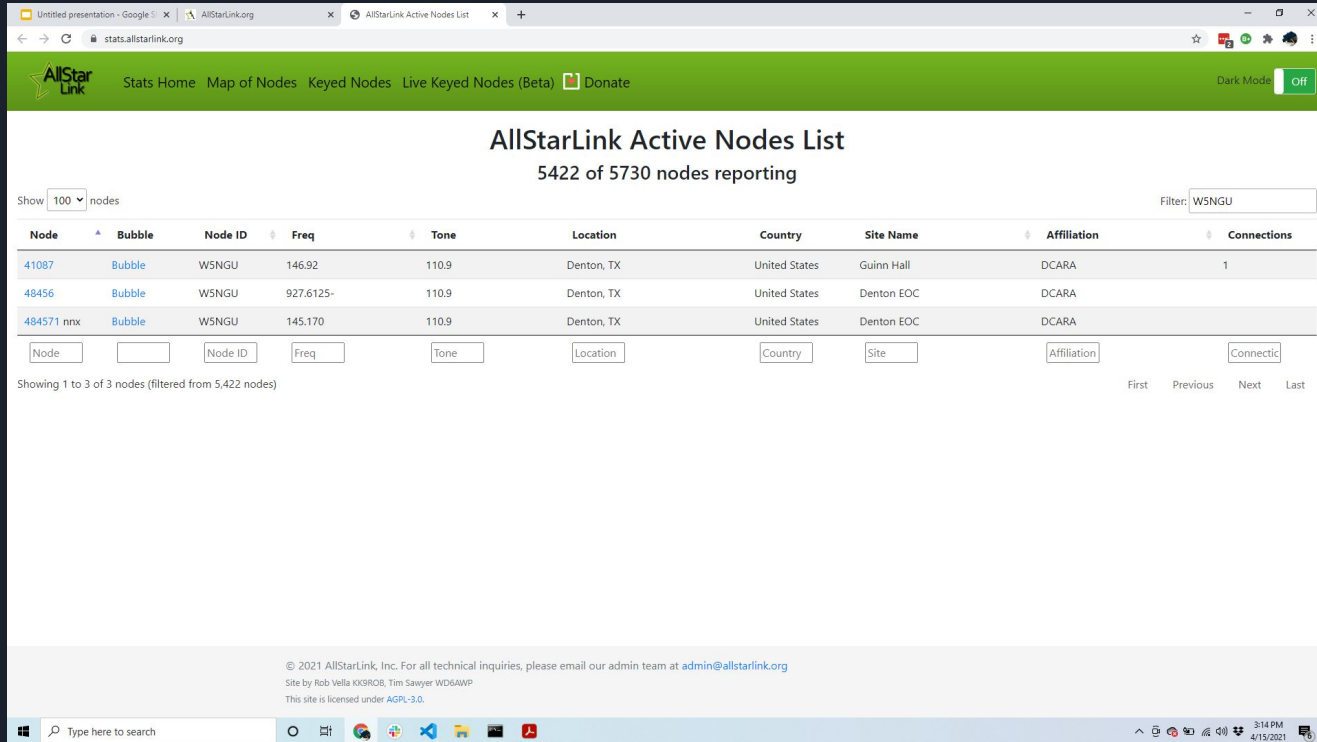
# Duplex Repeater Node



# How AllStar/Echolink work



# How to Find a Node Number



The screenshot shows a web browser displaying the AllStarLink Active Nodes List. The page title is "AllStarLink Active Nodes List" and it indicates "5422 of 5730 nodes reporting". A filter box is set to "W5NGU". The table below lists three nodes with columns for Node, Bubble, Node ID, Freq, Tone, Location, Country, Site Name, Affiliation, and Connections. Below the table are input fields for each column and pagination controls.

Stats Home Map of Nodes Keyed Nodes Live Keyed Nodes (Beta) Donate Dark Mode Off

## AllStarLink Active Nodes List

5422 of 5730 nodes reporting

Show 100 nodes Filter: W5NGU

Node	Bubble	Node ID	Freq	Tone	Location	Country	Site Name	Affiliation	Connections
41087	Bubble	W5NGU	146.92	110.9	Denton, TX	United States	Guinn Hall	DCARA	1
48456	Bubble	W5NGU	927.6125-	110.9	Denton, TX	United States	Denton EOC	DCARA	
484571 nrx	Bubble	W5NGU	145.170	110.9	Denton, TX	United States	Denton EOC	DCARA	

Node Node ID Freq Tone Location Country Site Affiliation Connect

Showing 1 to 3 of 3 nodes (filtered from 5,422 nodes) First Previous Next Last

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# User DTMF Commands

Common DTMF commands from a radio through a repeater

- Connect to a node Receive Only: \* 2 [node number]
- Connect to a node Transceive: \* 3 [node number]
- Read back list of what is connected: \* 7 0
- Unlink everything: \* 7 1
- Unlink a specific node: \* 1 [node number]
- Give the time: \* 8 1
- User Specified Commands: \*8, \*9, \*0, \*A, \*B, \*C, \*D



# What Else Can We Do with AllStar?

- Use scripts to download and play ARRL and ARN News
- Since AllStar runs on Linux we can use the User Defined commands to invoke programs on the Server Node which then plays an audio response on the repeater or simplex node.
  - Time of Day
  - Current Weather
  - Club Announcements
- The CRON service can be used to play announcements or configure the repeater based on time of day, day of week or day of month.
  - Using Festival Text to Speech we can have CRON create a voice announcement from a file that will be played on the repeater the day before a NET or as a reminder for a club meeting.
  - CRON can be used to link and unlink repeaters based on a schedule so NETs can be broadcast across a given group of repeaters



# Where to Get More Information

<https://allstarlink.org>

<https://hamvoip.org>