

ALLSTARLINK ON THE W7SCS REPEATER

Connected to the World!

NODE

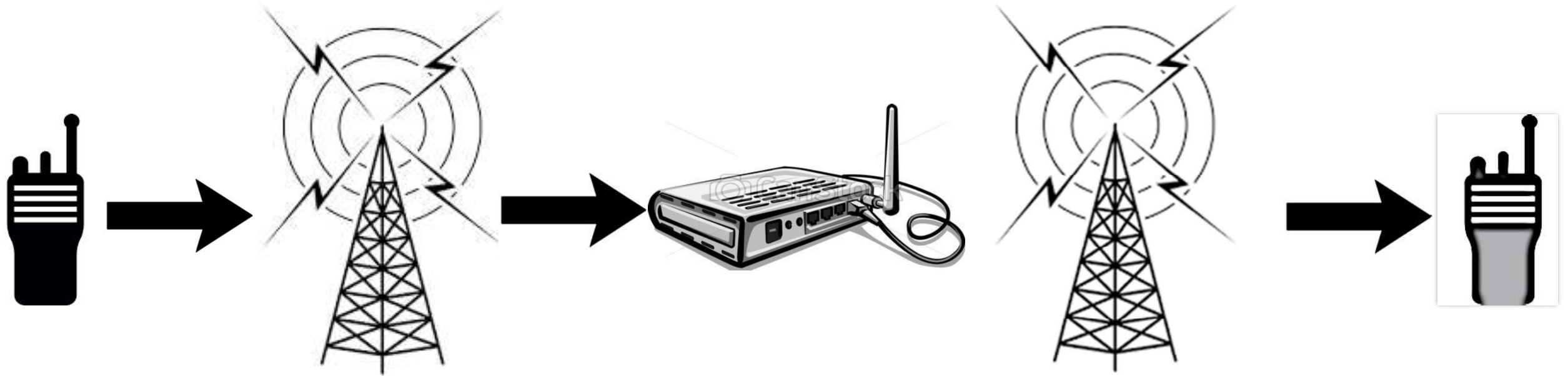
An AllStarLink node was built for us by Earl, WB6AMT. The approximate cost was \$250 because this serves as a controller for W7SCS locally as well as a node for connecting to other radios. All nodes are based on the Raspberry Pi.

You can get a smaller node for yourself from Earl or others who build them:

Radio nodes (Built-in Transceiver in VHF or UHF)

Radioless nodes (A box with a microphone – no radio)

WHAT IT IS...



VOIP Linking of Radios using Asterisk PBX

WHAT CAN IT DO?

AllStarLink is a Voice-Over-Internet-Protocol (VOIP) that allows amateur radio operators to link and unlink repeaters, radios & radioless modules together into a network.

As the controller, you have the responsibility to connect and disconnect the links when you are finished. It's easy to do but can easily leave things a bit messy if the connections aren't disconnected at the end.

Connections can be "Daisy-Chained" – multiple connections can build on each other. "A" can connect to "B" and also to "C" while "D" can connect to any of those nodes and be on all four stations.

DTMF TONES:

DTMF Codes are your main method of controlling the AllStarLink node at our repeater location. On most radios you must push and hold the transmit button while entering all of your codes. Some radios don't require a constant transmit button but you will need to find out the specifics of your device.

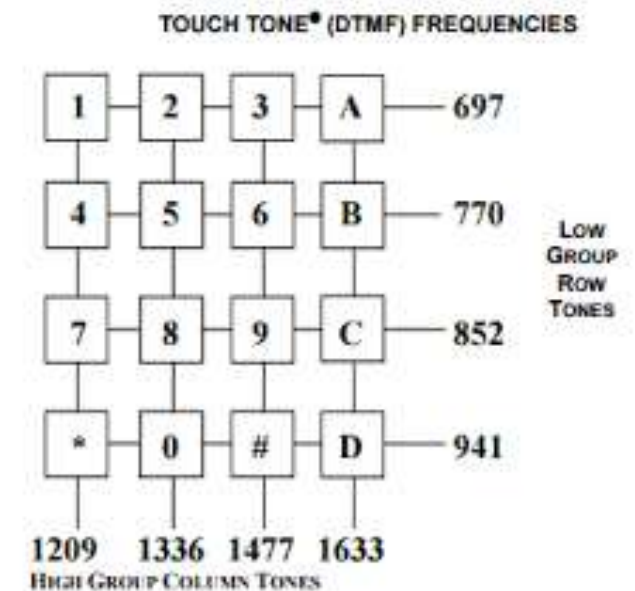
DTMF stands for “Dual Tone Multi-Frequency” and was developed by the Bell System for use as “TouchTone” dialing. Our radios have 4 additional buttons: “A”, “B”, “C”, & “D”.

DTMF TONES – DETAILS:

Each button consists of two tones, generated to comply with this grid. The DTMF decoder can determine the matching number by deciphering the tones that it hears.

Your radio should have a function to generate the “ABCD” tones, even if it does not have dedicated buttons. Check the user manual for details.

All AllStarLink operator commands begin with “*”



LINKING ON ALLSTARLINK

***1**xxxxxx (Disconnect from
xxxxxx)

***10** (Disconnect last station
connected)

***2**xxxxxx (Monitor but don't
transmit on xxxxxx)

***3**xxxxxx (Link to node
xxxxxx – Transmit & Receive)

Henderson ARC is “44045”

***344045** – Connects to the HARC
Hub, making us a satellite of their
system

***144045** – Disconnects from the
HARC Hub

***10** – Disconnects if it was linked
most recently

WHAT'S AVAILABLE?

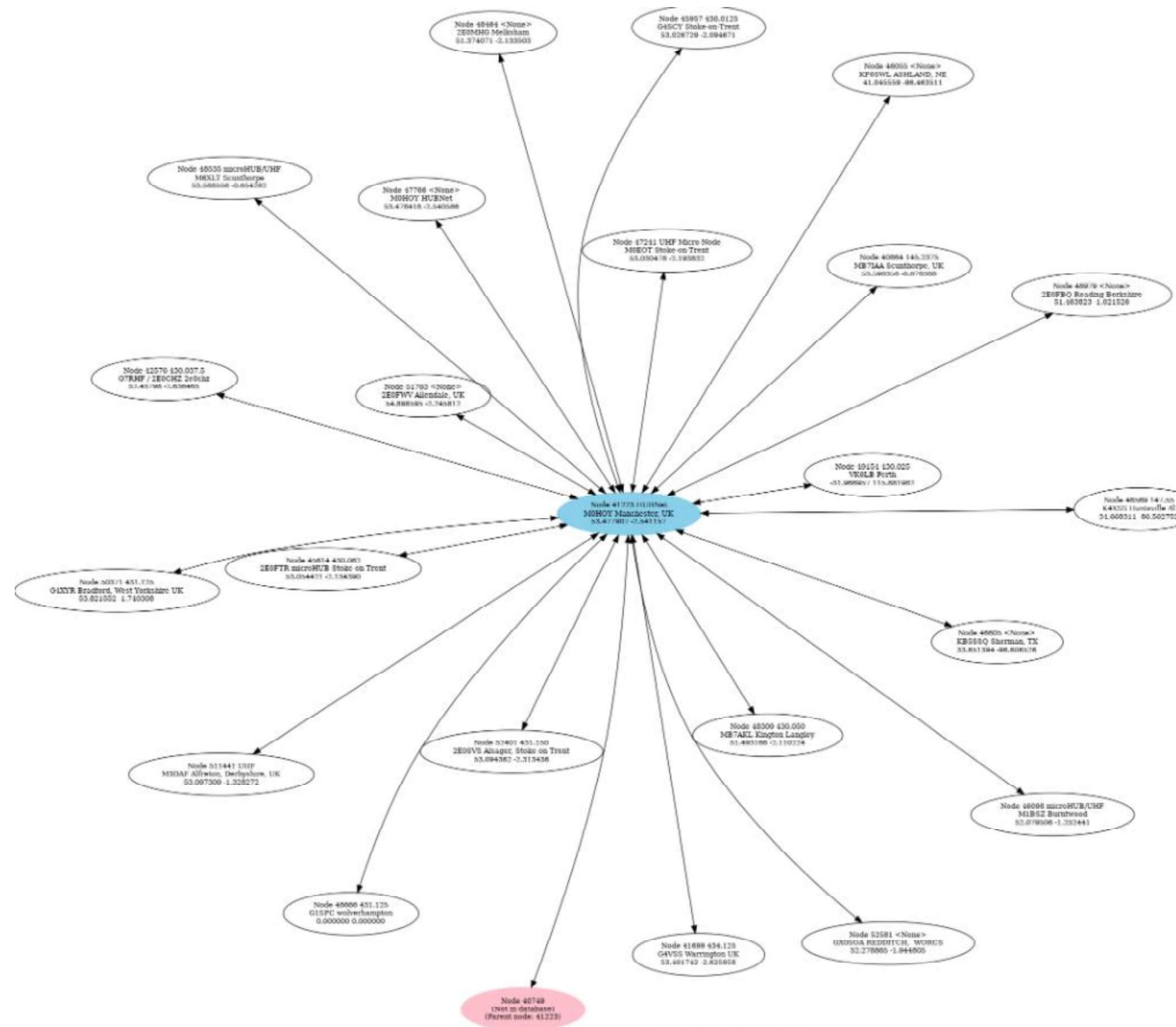
<http://stats.allstarlink.org/>

Complete Network Bubble Chart
Allstar Google Map
Clustered Open Street Map (beta)
Real Time List of keyed Nodes

For more information or to edit your node please login to the main Allstar Link website

Node	Map	Bubble Chart	Channel	CTCSS	Callsign	Location	First Heard
2000	Map	Bubble	ALBACORE HUB		WB6NIL	DownTown Los Arigeles, CA	1D 6H 33M 35S
2001	Map	Bubble	445.220-	123.0	WB6NIL	Alhambra, CA	3D 3H 14M 3S
2009	Map	Bubble	Hub		WGIZK	Phoenix, AZ	10H 44M 06S
2050	Map	Bubble	224.2800	146.2	W9CR	Tampa, Florida	7H 21M 41S
2062	Map	Bubble	LA HUB	Linked to 49842	KE6UPI	Los Angeles, CA	8H 12M 37S
2064	Map	Bubble	449.990 Simplex .1W	100.0	KE6UPI	Murrieta, CA	1D 7H 42M 24S
2065	Map	Bubble	CALNET SYSTEM		KE6PCV	Corona, CA	1D 6H 33M 38S
2066	Map	Bubble	445.220-	100.0	KE6PCV	Corona, CA	6D 16H 43M 19S
2072	Map	Bubble	W8CMN 220 Hub	w8cmn.net	W8FSM	Fenton, Michigan	10H 21M 33S
2074	Map	Bubble	W8CMN VHF Hub	w8cmn.net	W8FSM	Fenton, Michigan	46M 18S
2075	Map	Bubble	W8CMN UHF Hub	w8cmn.net	W8FSM	Fenton, Michigan	11H 35M 25S
20800	Map	Bubble	HUB	Public Use	KE6UPI	Dallas, TX	1D 6H 33M 24S
20801	Map	Bubble	DMR TG31066	SoCal BM	KE6UPI	Dallas, TX	1D 2H 43M 26S
2081	Map	Bubble	146.805 -	100.0	W6GTR	Temecula, CA	1D 5H 15M 20S
2085	Map	Bubble	GRONK Switching Cntr	gronkradio.net	W6XC	GRONK Bunker	6D 7H 21M 22S
2095	Map	Bubble	443.275+	156.7	KC0SOK	Derby, KS	1D 5H 6M 57S
2100	Map	Bubble			N4IRS	Vero Beach, FL	3H 29M 26S
2124	Map	Bubble	Warren Co. Hub	Connect Here	W3KCC	Warren Pennsylvania	3D 3H 14M 6S
2132	Map	Bubble	430.990	100.0	J11BQW	Zama, Kanagawa Japan	3D 0H 54M 44S
2134	Map	Bubble	146.725-		VK4RKP	MTCrosby Queensland Australia	20H 42M 41S
2135	Map	Bubble	WAN-RS Hub	Connect Here	W3WAN	Warren Pennsylvania	1D 5H 6M 56S
2138	Map	Bubble	442.775+	186.2	W3KCC	Ludlow PA	21H 33M 39S
2139	Map	Bubble	Nano Node AE		KJ6MID	Santa Barbara, CA	12H 26M 59S
2145	Map	Bubble	145.270-	74.4	W3WAN/R	Chambersburg, PA	2D 12H 57M 11S
2147	Map	Bubble	Rob's Main Node		KR1P	Layton, UT	15H 30M 32S
2154	Map	Bubble			N4IRS	Palm City, FL	18H 27M 14S
2161	Map	Bubble	Portable Simplex	node	KF7AY	Portable or Boulder City NV	7H 13M 33S

HUBNET UK



Alistar Link [surrounding node 41223] status of 11/10/20 22:41:21 GMT

ADDITIONAL CODES

***70 – Local Connection Status**

***73 – Systemwide Connection Status**

***81 – Say System Time**

***A9 – Parrot Once (this command may change)**

PRACTICAL DEMONSTRATION

Connect to HubNet UK (node 41223)

1. Announce your call “W6MW controlling”
2. Key Radio & Enter *341223
3. Connection Made & Announced. Have a QSO!
4. Find a Break in the Conversation
5. Key Radio & Enter *10 (Disconnect Last Connection)
6. Announce your call sign. “W6MW clear”

PLEASE REMEMBER TO UNLINK!

If you leave the repeater linked”

- 1. Everyone has to listen to it until someone clears it.**
- 2. It's harder to use the repeater between QSO's**
- 3. Everyone on both sides of the link hear us**

W7SCS
ALLSTARLINK

Enjoy!

de Mark, W6MW

IF YOU WANT YOUR OWN... SOME VENDORS OF ALLSTAR NODES:

<https://wb6amt.com/t-hunt-gear/>

<https://hamprojects.info/shari/>

<https://technobygeorge.com/>

<https://www.node-ventures.com/>