

## Echolink/AllStarLink on the GB3BN Repeater

EchoLink<sup>1</sup> started life as iLink, developed by Graham Barnes (M0CSH) in 2001. In 2002 Jonathan Taylor (K1RFD) developed a Microsoft Windows front end for iLink and so EchoLink was born.

The GB3BN repeater was an early adopter of this then new technology. GB3BN holds the very early EchoLink node number of **1938**.

EchoLink uses Voice Over Internet Protocol (VOIP) to link nodes together and uses DTMF tones to control the linking. At the time of writing this there were, worldwide, 2743 RF repeaters, 2785 RF simplex links (gateways), 963 individual users and 235 Conference Servers (Chat Rooms) logged in to the EchoLink system.

Fast forward to around 2010 and we have AllStarLink<sup>2</sup>. This works in the same way as EchoLink but offers more modern and better quality VOIP and better DTMF decoding. At the time of writing this there were, worldwide, 12328 nodes registered (connected) on the AllStarLink system<sup>3</sup>. GB3BN holds the AllStarLink node number **68101**.

Nodes can be RF repeaters (like GB3BN), RF simplex gateways or individual users using RF hotspots. Quite a few RF nodes have both EchoLink and AllStarLink capability like GB3BN.

An EchoLink or AllStarLink node can be linked to another node over RF using DTMF commands. A list of EchoLink nodes can be found here: <https://www.echolink.org/logins.jsp> and for AllStarLink here: <https://stats.allstarlink.org/>

The EchoLink network can also be accessed from a mobile phone or tablet using the EchoLink application available from the appropriate application store on Android or Apple iOS.

There is also web access at <https://webapp.echolink.org/> and Microsoft Windows based software<sup>4</sup>.

The AllStarLink network can also be accessed from a mobile phone or tablet using the 'DVSwitch' application on Android devices and the 'RepeaterPhone' application on Apple iOS. To use these you will need an AllStarLink login and password obtainable from here: <https://www.allstarlink.org/register/index.php>. You do not need an AllStarLink node number unless you plan to set up an RF gateway.

To link to GB3BN from a remote **EchoLink** RF node you transmit the DTMF tone sequence 1938 to the node. If this is decoded correctly you will hear a voice announcement confirming the connection. **Put out a call**. When you have finished send DTMF # to close down the link.

To link to GB3BN from a remote **AllStarLink** RF node you transmit the DTMF tone sequence \*368101. If this is decoded correctly you will hear a voice announcement confirming the connection. **Put out a call**. When you have finished send the DTMF sequence \*168101 to close down the link.

It is usually best to send the DTMF codes manually from the radio's keypad rather than using the DTMF autodiallers that some radios have.

To link out from GB3BN to a remote **AllStarLink** RF node you transmit the DTMF tone sequence \*3{node number}. If this is decoded correctly you will hear a voice announcement confirming the connection. **Put out a call**. When you have finished send the DTMF sequence \*1{node number} to close down the link.

To link out from GB3BN to a remote **EchoLink** RF node you use the DTMF tone sequence \*33 followed by the remote EchoLink's node number padded out to 6 digits with leading zeroes. If this is decoded correctly you will hear a voice announcement confirming the connection. **Put out a call**. When you have finished use \*13 followed by the same padded node number to close down the link.

If a station links in to GB3BN via EchoLink or AllStarLink you will not hear a voice announcement. It is up to the remote station to put out a voice call once they are connected. If there is a QSO in progress on GB3BN then, provided the participants are leaving long enough gaps between overs, the remote station will be able to break in to the QSO. You can check if anyone is connected here: <https://stats.allstarlink.org/stats/68101>

To find out if there is a connection in progress on GB3BN transmit the DTMF sequence \*70 to the repeater and you will hear a voice announcement giving the link status. The AllStarLink system does not currently convert some node numbers into callsigns for these announcements. If there are no connections it will announce its node number followed by "repeat only". If any stations are connected remotely it will announce their node numbers or callsigns followed by "transceive".

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<sup>1</sup> <https://www.echolink.org/>

<sup>2</sup> <https://www.allstarlink.org/>

<sup>3</sup> <https://www.allstarlink.org/starwars.php>

<sup>4</sup> <https://www.echolink.org/download.htm>