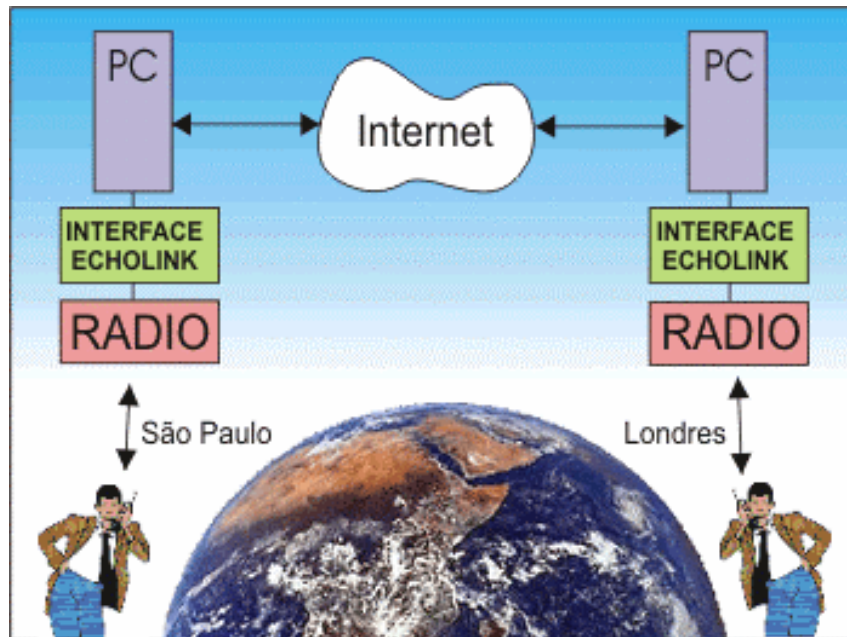


# Hamtronix

## ECHOLINK INTERFACE



## Setup and Operation Manual

Hardware Revision E

**Content**

Index .....	01
Technical Support .....	01
Warranty .....	01
Product Description .....	01
Interface Setup .....	02
Condition Indication LEDs .....	03
Self-test .....	03
Software Setup .....	03
Solving Problems .....	06
DTMF Commands.....	06

**TECHNICAL SUPPORT**

If you still have any questions after reading through this manual about interface setup, please see our website at [www.hamtronix.com](http://www.hamtronix.com) and look through our frequently asked questions (FAQ) database. You will be able to find updated information and answers to frequently asked questions. If you can't find an answer there, please send an e-mail to our help desk: [support@hamtronix.com](mailto:support@hamtronix.com). As for this product, our help desk is limited to solving problems involving interface setup only. Problems related to configuration, operation, software or servers should be referred to the support areas of the respective manufacturers. Although our interface works well with I-Link and eQSO software, we have described only the setup of Echolink software because it is the most popular. For more details about I-Link and eQSO setup, please see their respective websites.

Websites of software programs that work well with this interface are:

Echolink: <http://www.echolink.org>;

I-Link: <http://www.echolinkradio.com/>;

eQSO: <http://www.eqso.org/>

**WARRANTY**

This card is guaranteed from all manufacturing problems for six months from the purchase date. This warranty is valid for the first buyer only and is non-transferable. Problems due to electrical outbreaks, atmospheric discharges, or misuse shall not be covered by this warranty and imply its annulment.

Circuit modifications, except if they required by this manual or by another manufacturer's documentation, shall void this warranty. All interface connections are done through jacks and plugs. Any trace of solder connections done directly to the card shall void the warranty. Should this warranty be demanded, the interested party shall be responsible for the payment of all transport expenses.

**PRODUCT DESCRIPTION**

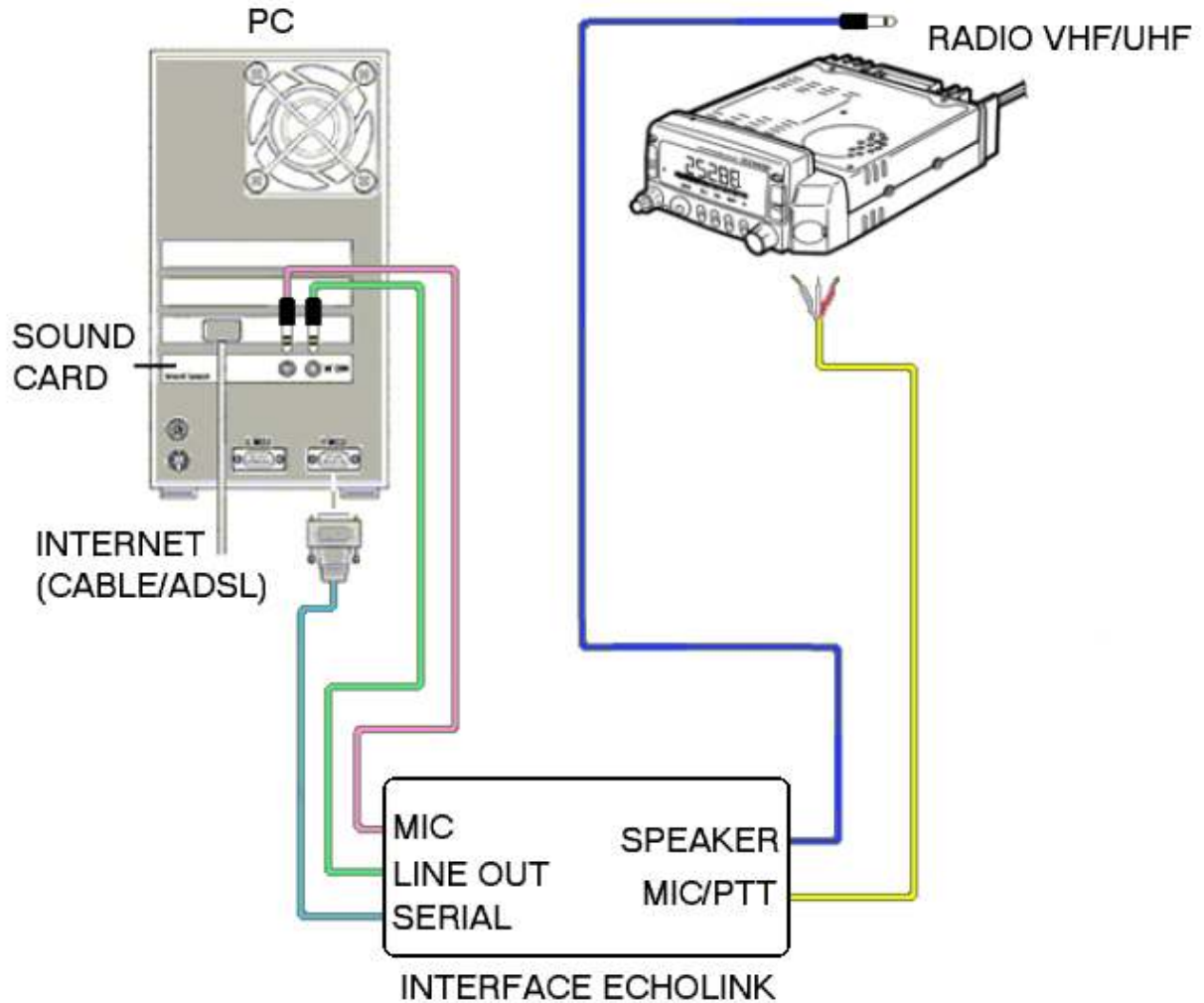
Echolink is a new method of communication that represents a revolution of the amateur radio concept. Thanks to the union of Voice over IP (VoIP) and radio technologies it is possible to communicate to anywhere in the world without depending on propagation. A radio amateur operator in Sao Paulo can talk to another one in London with the same audio quality as that of stations operating in the same city.

Echolink interface allows you and your colleagues to access the system from VHF/UHF/HF mobile, portable, and base stations. It can work either in simplex or in repeater mode. Its installation is extremely simple. It requires only external connections between a radio and a computer. In addition, you to have a total remote control of the system using DTMF.

**INTERFACE SETUP**

Plug the cables between the interface, the radio and the computer as shown by the drawing and the table below:

**CONNECTION SCHEME**



Interface	Plug to	Cable used
RADIO SPEAKER	The radio speaker output	Mono Plug
RADIO MIC/PTT	The radio: White to MIC input, Red to PTT and Mesh to ground <sup>2</sup>	See note
PC MIC	Computer sound card microphone input	Border Stereo Plug
PC SPK	Computer sound card speakers output	Middle Stereo Plug
SERIAL	A free computer serial port	DB9 Female Connector

**Notes:**

<sup>1</sup> This cable is supplied without jack because radio manufacturers use different jacks. This signal may be linked either to the radio frontal microphone jack or the data jack (DATA) on radios that have this option. For more details about radio jacks, please refer to the manufacturer's instruction manual. PTT activation is done by grounding (open collector). If the transmitter used needs activation signal other than by grounding, which is quite rare, please get in touch with our help desk for more details about how to proceed in this case.

**OPERATION INDICATION LED**

When the led is on the interface is ready to operate. Wit led off transmitter is active

**SOFTWARE SETUP****Installing Echolink**

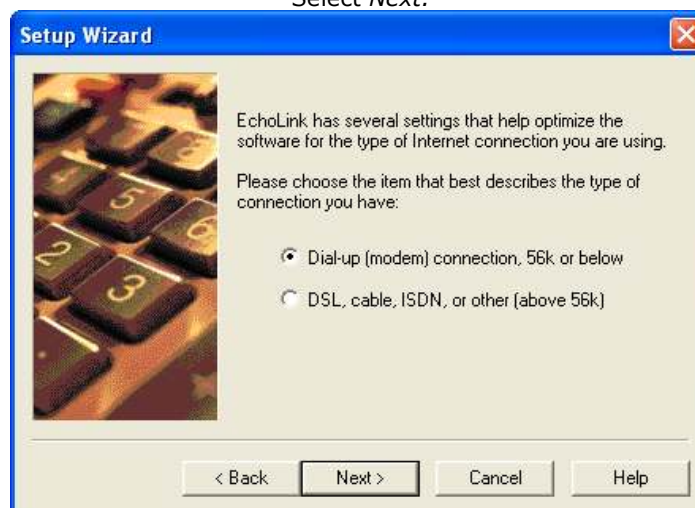
If you already use Echolink and have registered your callsign, simply move on to your *TOOLS/SETUP* and change the configuration from *Single User* to *Sysop*. For more details about this configuration, please refer to software's *Help*.

If this is the first time you are using Echolink, please refer to <http://www.echolink.org> and download the setup program. After that, execute it and follow the instructions appearing on the computer screen. After installation is finished, run the program. Follow the instructions thoroughly as they are shown on the computer screen until the following window appears:



Choose *Sysop* and *Simplex Link* to operate in simplex mode or *Sysop* and *Repeater Link* to operate in repeater mode.

Select *Next*.



Choose the connection type that you use to access the Internet and then select *Next*.



Select the option Direct-controlled (RIGblaster or similar).  
Also choose a free serial port which you will connect the interface to.

Note: The protocol used by Echolink Hamtronix Interface to communicate with the operator is *Direct-controlled*. If you choose the wrong option your interface will not work properly.

Select *Next*.



Fill in the form with your callsign, password, first name, location and e-mail address.

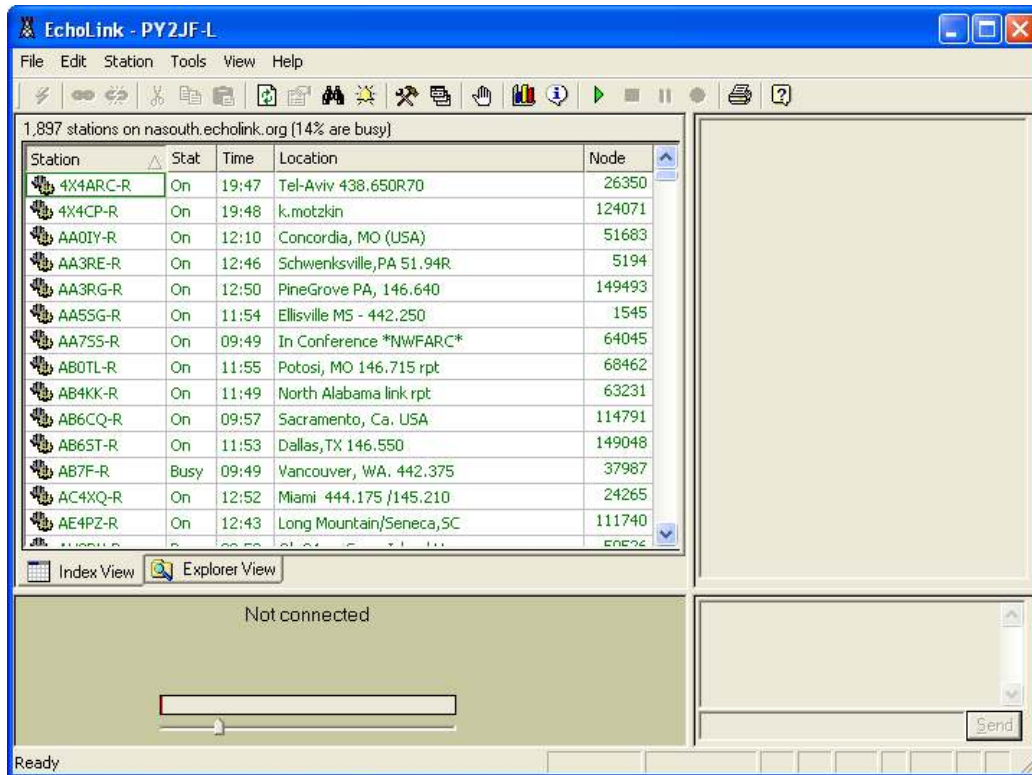
Fill in the callsign field following the rule below:

To use the callsign for simplex operation (simplex frequency), use your callsign followed by -L (Ex.: PY2JF-L). To use the interface for repeater operation, use your callsign followed by -R (Ex.: PY2JF-R).  
Select *Next*.

In the next window you will be asked your continent. Choose your continent and select *Next* and then *Finish*.

If this is the first time you have used your callsign on the Echolink system, you will have to wait until your callsign is validated. Validation may take from a few minutes to a few days since it is done manually by volunteers. Typically they will check out your callsign with the issuing agency (FCC in the United States) and after this process your Echolink software will be permitted to connect. After your callsign is

approved, or if you have a previously registered one, your access is immediate and a window similar to the following one will appear.



## DTMF COMMANDS

With DTMF tones you can remote-control several functions through any radio equipped with a DTMF keypad. As there are a number of commands, it is recommended to check the configuration in the menu *Tools/Sysop Setup/DTMF*. For an explanation of the operation and configuration of this feature, please refer to the Help about DTMF Functions menu.

Some examples of commands are listed below:

- To disconnect from a station: *type #*
- To connect to a station, type your index code (Index): *type 9020*
- To reconnect to a station that you has just been disconnected from: *type 09*



# Hamtronix

☎ 55 19 3405-4888

[www.hamtronix.com](http://www.hamtronix.com)

© 2008