



Fox Delta

Amateur Radio Projects & Kits

FD- FoxEcho AGC

Tech info, Schematic & Parts List: A Simple AGC board for Foxecho

Most radio transmissions at VOIP feed point end up with varied audio level. Feeding this unregulated, raw audio to Echolink/VOIP servers may result in a “hard to hear” signals at the other end.

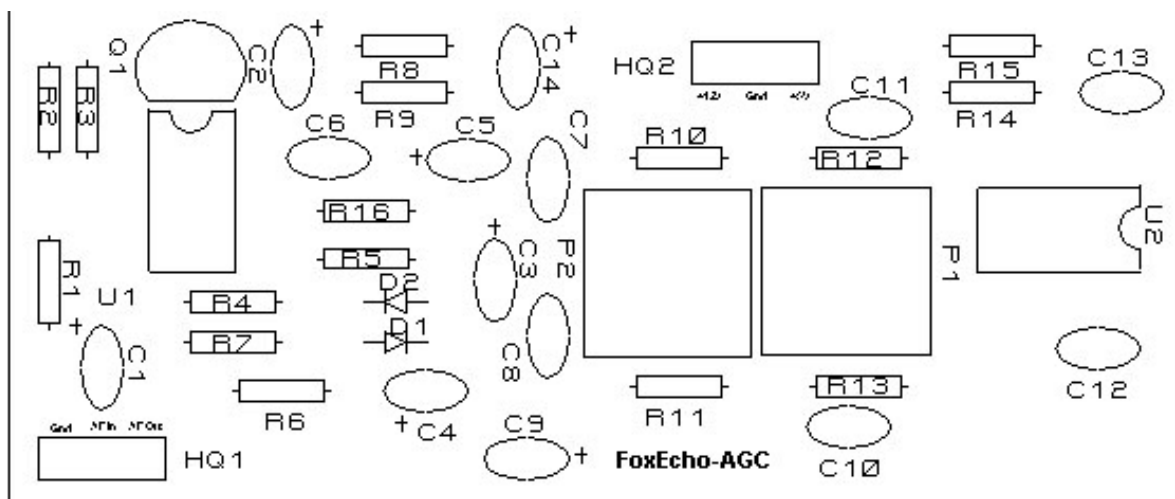
This small, 2 IC board is designed specially to over come above problem by way of providing some AGC action on the received audio and also provide effective tone controls to “Clean up” unwanted stuff.

FoxEcho AGC Board Parts List:

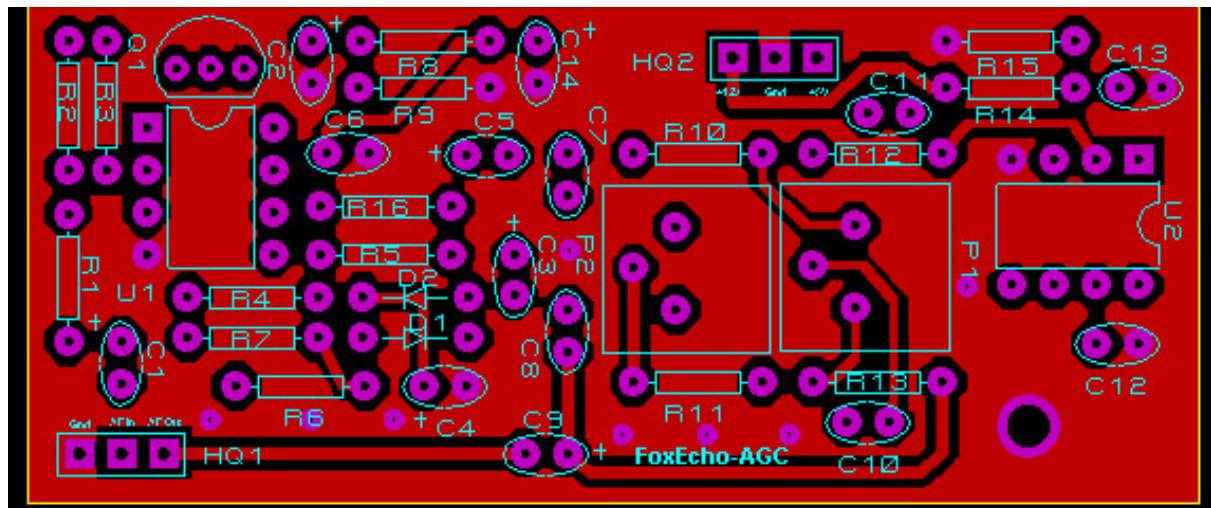
Quantity	Part Details /ID
1	Foxecho AGC PTH PCB
2	3pin SIL headers for HQ1/2
1	TL081
1	NE5534 / MCP6021
2	8Pin IC sockets
2	100K presets
1	BC548C
2	1uf Tantalum
2	4.7uf Tantalum
2	10uf Elec
1	100uf Elec
2	Diodes 1N4148
16	Resistors as per list
2	3300pf (C7, 8)
2	33000pf (C10, 13)
2	100nf (C12, 6)

Resistors	
R1, 6	220K
R2, 4, 7	100k
R 14, 15	47k
R8, 9, 10, 11, 12, 13,	10k
R5	470
R16	1k
R3	4.7k

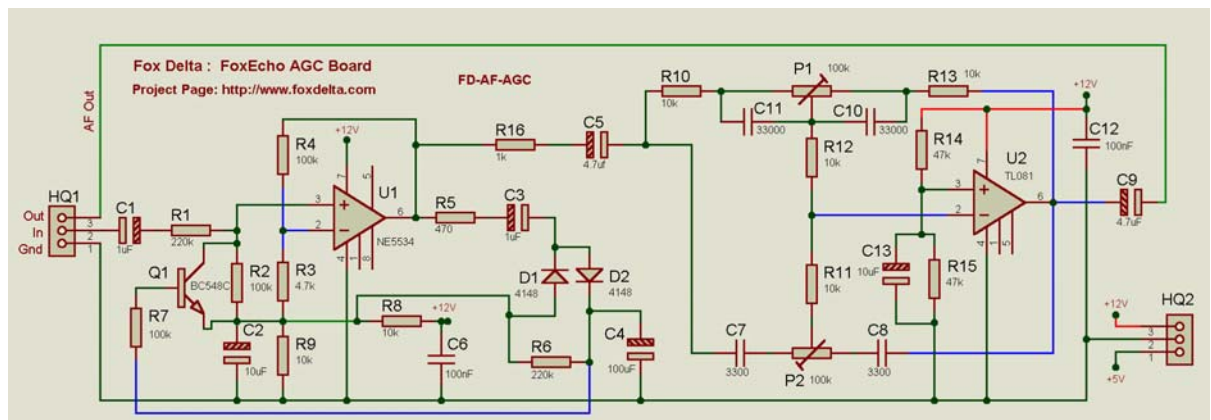
Silk Snap:



Picture of the PCB: 7cm X 3cm:



Schematic of the FoxEcho AGC Board:



Installation:

Foxecho boards are supplied with a shorting pin at header HQ1. To install this AGC board, simply remove this shorting pin & plug-in this board.

This AGC Board will mate at HQ1 and HQ2 headers of foxecho board. In addition an alum stand post with threads on both side and two 2mm screws is provided to support board at third point. (Two supports are HQ1 & 2)

I hope with this simple project, amateurs linking VOIP will benefit having better quality & regulated audio feed to Internet.

Dinesh Gajjar
17th April 2007