Fox Delta

Amateur Radio Projects & Kits

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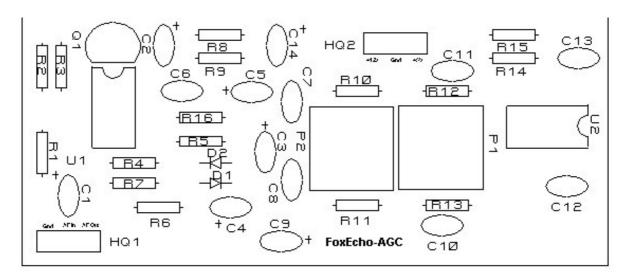
This small, 2 IC board is designed specially to over come above problem by way of providing some AGC action on the received audio and also provide effective tone controls to "Clean up" unwanted stuff.
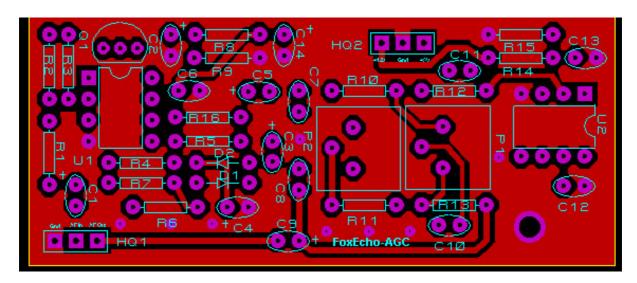
FoxEcho AGC Board Parts List:

Quantity	Part Details /ID
1	Foxecho AGC PTH PCB
2	3pin SIL headers for HQ1/2
2	TL081
2	8Pin IC sockets
2	100K presets
1	BC548C
3	1uf Elec C1, C3, C14
2	4.7uf Elec C5, C9
2	10uf Elec C13, C2
1	100uf Elec C4
2	Diodes 1N4148
16	Resistors as per list
2	.0033uf (C7, 8)
2	.04uf (C10, 11)
2	.1uf (C12, 6)

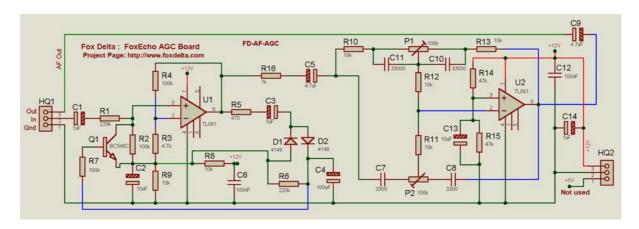| Resistors	
R1, 6	220K
R2, 4, 7	100k
R 14, 15	47k
R8, 9, 10, 11, 12, 13,	10k
R5	470
R16	1k
R3	4.7k

Silk Snap:

Picture of the PCB: 7cm X 3cm:

Schematic of the FoxEcho AGC Board:

Installation:

Foxecho-K7 boards are supplied with a shorting pin at header HQ1. To install this AGC board, simply remove this shorting pin & plug-in this board.

AGC Board will mate at HQ1 and HQ2 headers of foxecho board. HQ2 is a Female 3pin header, which is either supplied with foxecho kits or with AGC kit. In addition, if you wish to provide additional support to AGC board, a third mounting hole is provided where you may use a 2mm bolt & a nut with a sleeve.

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

Dinesh Gajjar
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