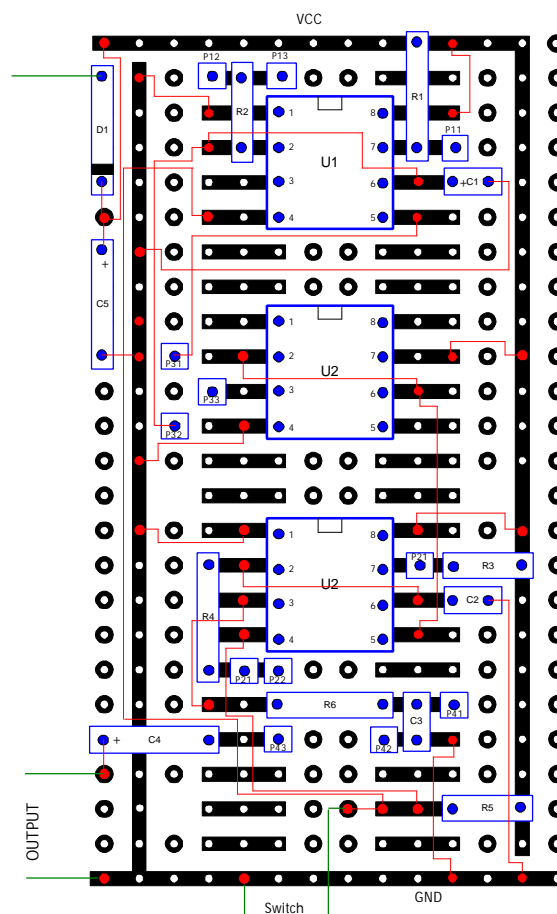


Simple Siren (or "Rasta-Box") for your soundsystem

I built this effect according to a schematic given to me on the discussion board. It isn't very hard to figure out, and with some caution, you can make it work. The parts and the tin box cost me around \$20 total, so its quite cost effective. It's fun to build too. Among the tips I can give you are:

- Try to have some space between the different pieces so nothing will get heated up and burnt.
- Put the battery outside the box for the same reason (see photo).
- Insert the chips only after you have finished soldering everything.
- Connect the output as stereo (otherwise you'll only hear it on your left or right speaker, but then be sure NEVER to connect a mono cable there, or it might go short circuit).
- Keep your wires organized and labeled for future repairs.
- Drill a few holes on each side of the box for ventilation.
- For the switch, buy a momentary, normally closed switch, a normally open switch will cause a ceaseless siren sound until you press the button.
- You might want to use the attached Visio schematic to give you a clue about how setup should look like, work en synch with the original.



Controls

All done, you will have 4 potentiometers (that is changing resistors).

These control the sound output:

1. Volume control - No need to explain, as a caution measure I would never allow it to go maximum, instead turn up the PA channel.
2. Tone control - This goes from very deep and fuzzy bass sound to an extremely high pitch.
3. Amplitude control - Determines how "high" and at the same time (its symmetrical) how "low" the sound will go
4. Frequency control - Determines how many rounds the oscillator performs per unit of time.

You can preset all four controls and get a siren sound or you can change the tone while playing to create cool sounds. Another option is tapping the switch with your palm to achieve a rhythm effect, that can also be combined with a gradual change of tone, in that case though, a delay/echo is vital, otherwise it would sound like an unorganized stacato. (check out the 20 sec. sound sample)

Sound

The only problem with the Rasta-Box is that it doesn't have echo or delay in it, what I do is connect it as a channel through an old 4-channel RYM 108 mini-mixer, and use its "delay" and "repeat" controls to achieve a fair sound. Your alternative can be running it through any guitar analog delay,



computer plugin or other, just make sure you don't get a mono cable into the Rasta-Box if its set on stereo.

Good Luck...

Toby

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- attached : 2 photos and a sound sample