

20,000ms/\$20 AUDIO LOOPER

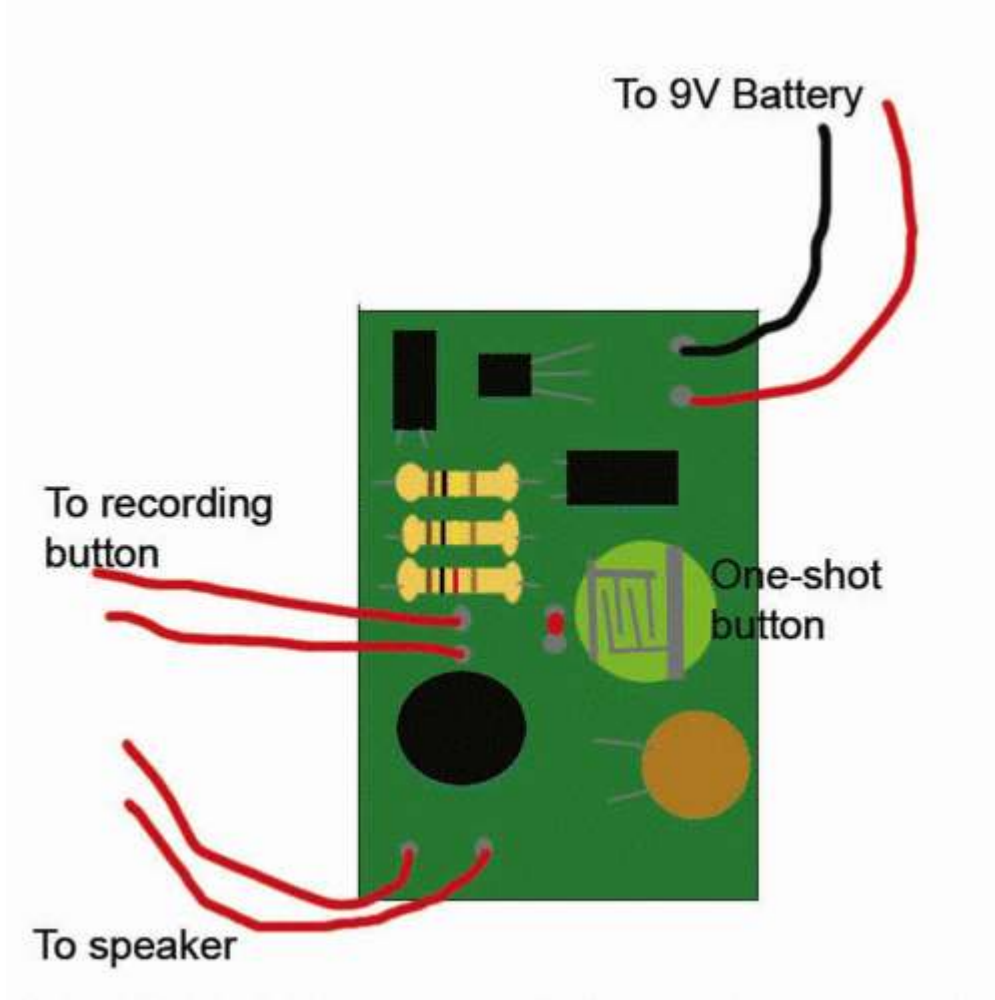
Designed and constructed by a Boston University chemistry major posting as 'dosher'
which is Latin for "smarter than you"



Parts list:

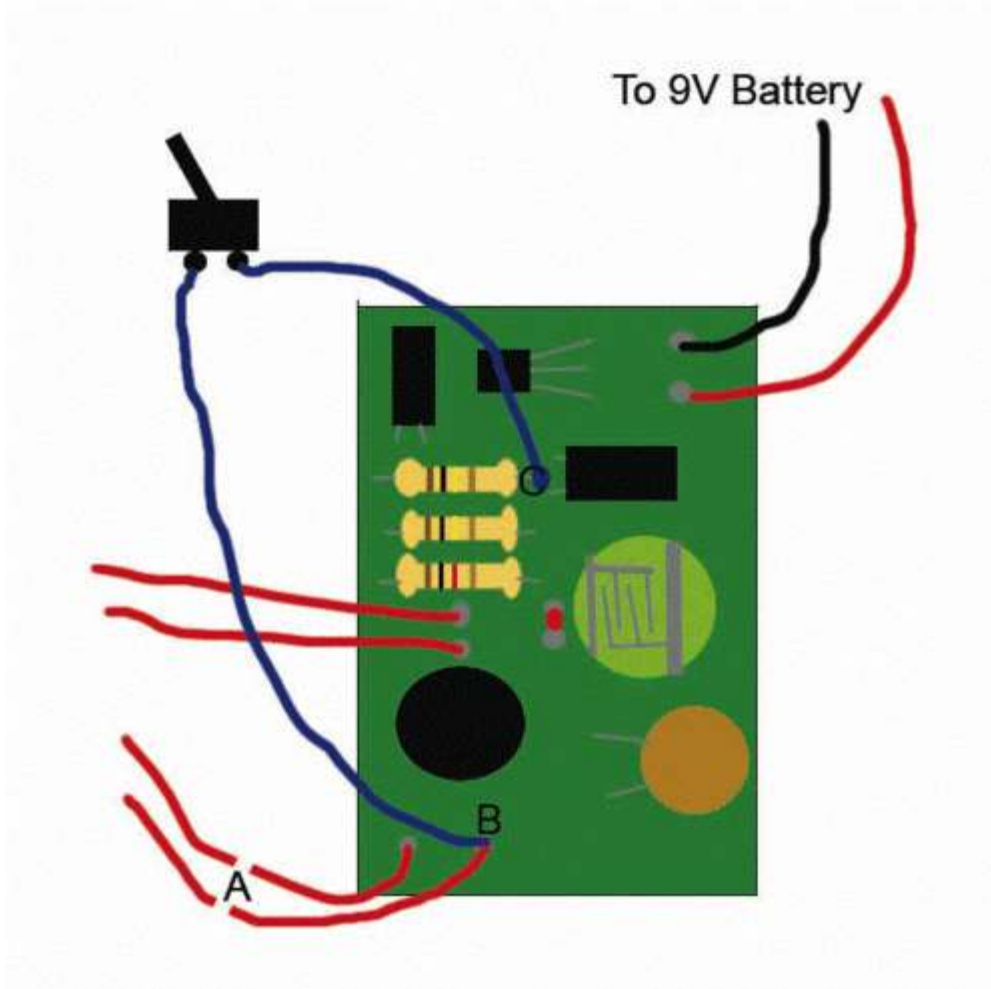
(all p/n are Radioshack)

1. 20-second recording module, part #276-1323
2. Two output jacks of your choice (I used 1/8" mono phone jacks)
3. 1 SPST toggle switch
4. 1 (or more) N.O. momentary pushbutton switches
5. 1 9V battery
6. A cool box/container to put it in
7. Supplies that I assume you already have: wire, wire clippers, solder, a soldering iron



The PCB:

This is a drawing of the small circuit board that is the entirety of the recording module. It has a little speaker, 9V battery clip, pushbutton switch on an attached mini PCB, another pushbutton switch attached to the main board, a black-blob IC, and various resistors, capacitors, and a transistor.

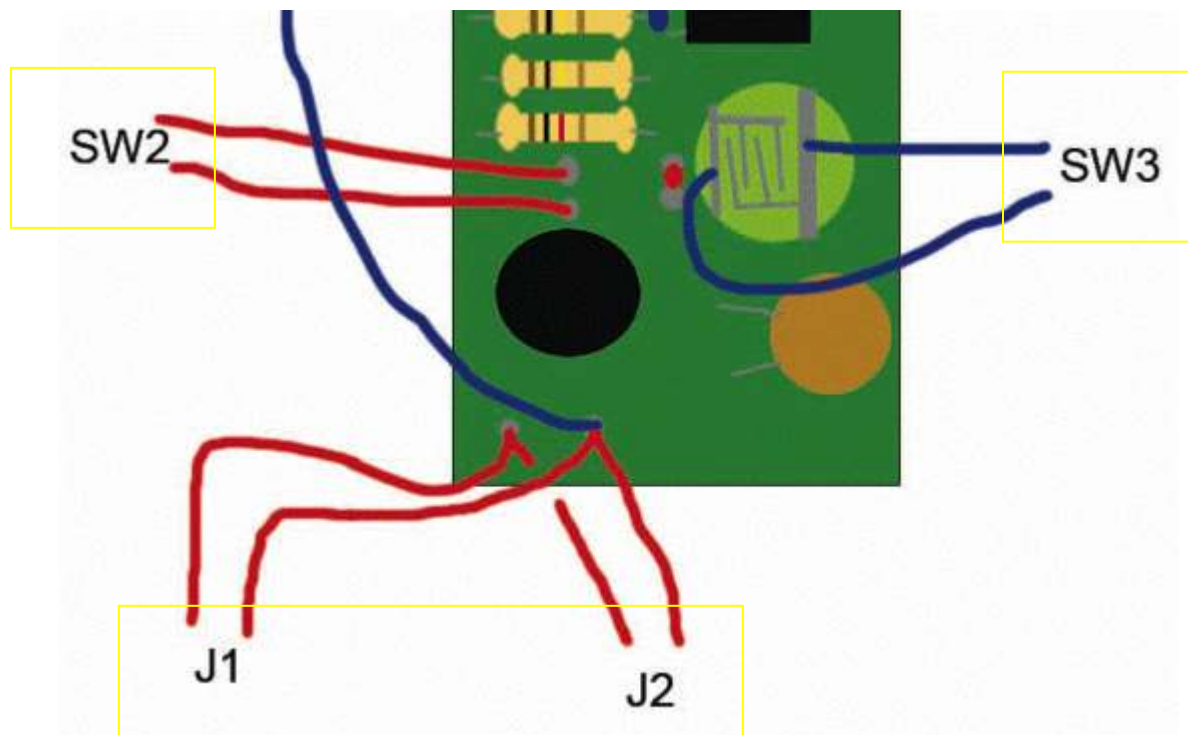


Construction:

Pry the tabs up which keep the pushbutton on the main board. They are on the back of the board. The button itself should come off easily.

Cut the wire leading to the speaker at point A, or you can simply de-solder where they join to the PCB.

Locate R3, which is labeled on the board itself. If you can't read the numbers on the board, it's the resistor at the top, if your board is oriented like the picture above. The lead on the inside, point C, is where you will solder one wire. Attach the other end of that wire to one lug of an SPST toggle switch. Attach another wire between the other lug and either one of the points where the speaker attaches to the board; shown is at point B. This is the loop connection.

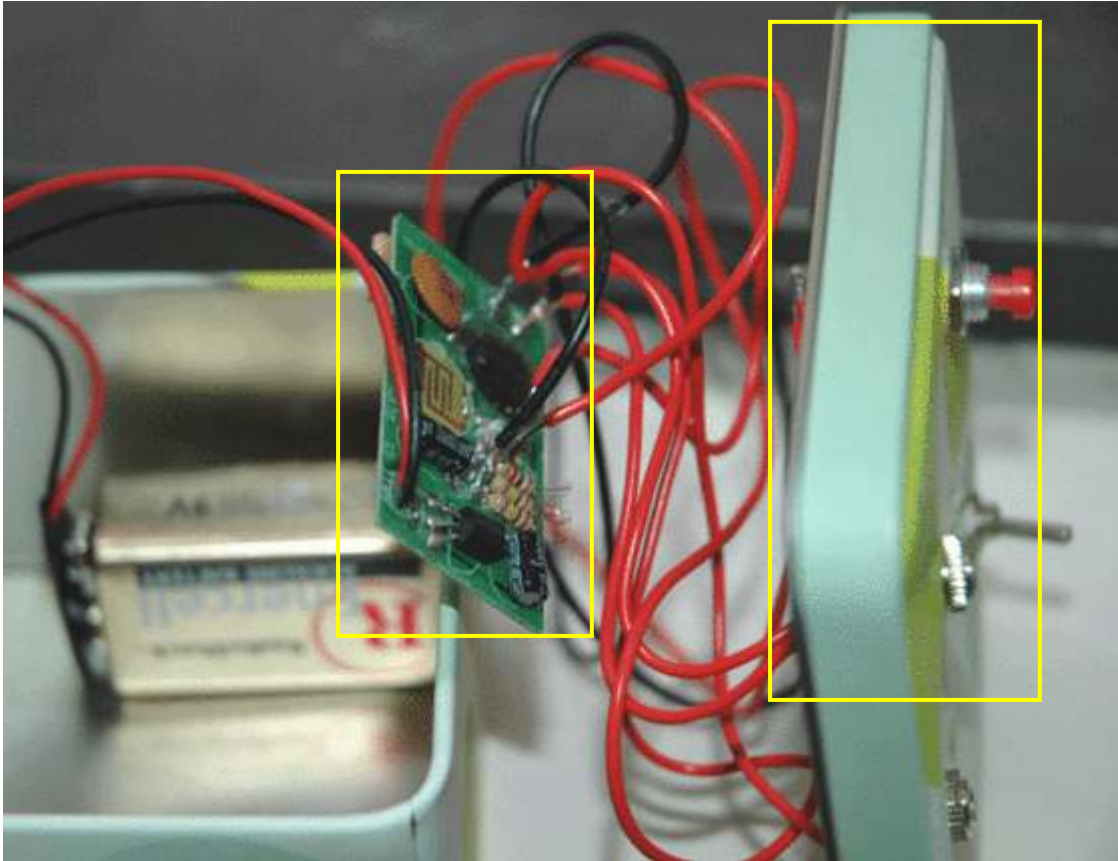


Construction cont.:

Solder two wires at each point where the speaker wires were. At the end of each, attach the audio jack of your choice: 1/4", 1/8", RCA, etc. Shown is 1/8" mono-jacks..

Some optional steps:

1. Detach the existing pushbutton switch on the smaller PCB at SW2. This can be replaced with an easier-to-mount N.O. momentary pushbutton switch.
2. Make a new one-shot switch by soldering directly to the exposed traces where the button on the main board used to be.



Construction cont.:

Install in an appropriate housing. Shown is a watch case- we suggest using a ‘stomp’ case. Paint in flashy ‘Rock Star’ colors or leave plain for the vintage ‘beat-up’ look.

To record, input device to either jack, hold down the momentary switch and speak/play. When done recording (up to 20 seconds), let go of the button.

To playback, attach a speaker to unused jack and flip the toggle switch. Audio will loop continuously.

Expect ‘ghosts’ in the machine.