CT Ghostbox Research

The Technology of the GHOST BOX

The Ghostbox has been called *"the first two-way communication device between the earthly realm and the spiritual realm".* **Ever since Thomas Edison introduced the concept, the idea of communicating with the dead without a spirit medium has been a subject of intrigue for decades. Above is Chris Salois' CGB4, modified from a Radio Shack 12-589 with an adjustable rate, linear frequency sweep.**

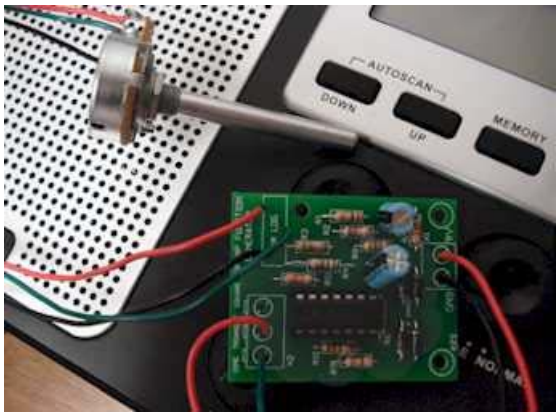
The modified radio above is only part of the Ghostbox researcher's toolbox. Proper research must be conducted with a voice recording device such as the Zoom H2. During a session, the Ghostbox is adjusted to a frequency sweep rate and volume to suit the researcher's taste, the recorder is turned on, and contact is attempted. The researcher will often prompt the box with questions...

Sometimes the answers are surprising.

Listen to this sample session:

In theory, the rapidly changing channels provides access to both the energy and the opportunity for disembodied spirits to associate our phonemes, the bits and pieces of our spoken language into what they need to communicate. It doesn't particularly matter if they have learned to manipulate energy and matter via psycho kinetics, or if they exist in a three dimensional, parallel reality, and they use devices similar to our own - the results speak for themselves.

The conversion of a common radio into a Ghostbox is relatively simple. All you need to do is to interrupt the radio's electronic tuning circuit, and insert a small,

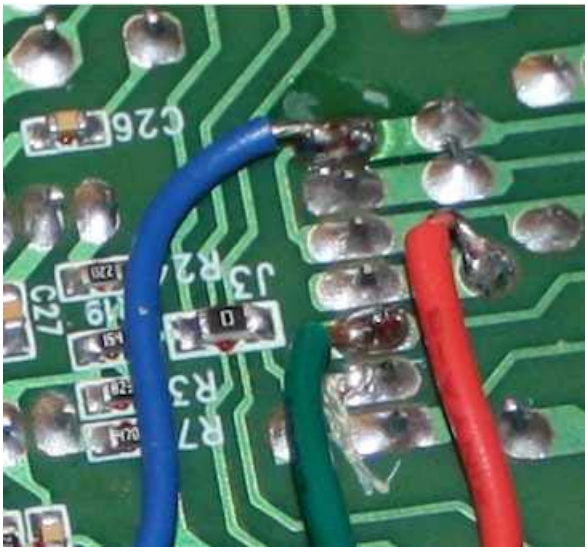


tunable sweep circuit shown to the left.

The insertion of the sweep circuit can be intimidating when you first take the cover off a perfectly good radio with intent to tinker.

Actually, today's circuit boards are relatively tolerant to someone with a small soldering iron. That greenish color is called a "solder mask", and it helps prevent hot solder from bridging circuits during the manufacturing process. While this protective coat is not "idiot proof", it does help you find some confidence when you are the one holding the iron.

For as foreign and intimidating as this may look, the only detail you have to attend to in here is the red and green wire from the tuning circuit.



The picture to left details the soldering locations for the red and green wires from the tuning circuit. The blue wire is a "Jumper" circuit that was installed during the manufacturing process.

Please note that this only applies to the Radio Shack 12-589. If you start hacking into anything else, all bets are off.

The trick to making successful connections in this world is that the solder must be hot enough to flow and fill the voids in the wire strands, and penetrate the through holes on the board. If the iron is too hot, you can burn the circuit board, requiring more extensive repairs. If you have never done this before, I would suggest that you practice on something else first until you can make a clean looking connection. It does take some practice.

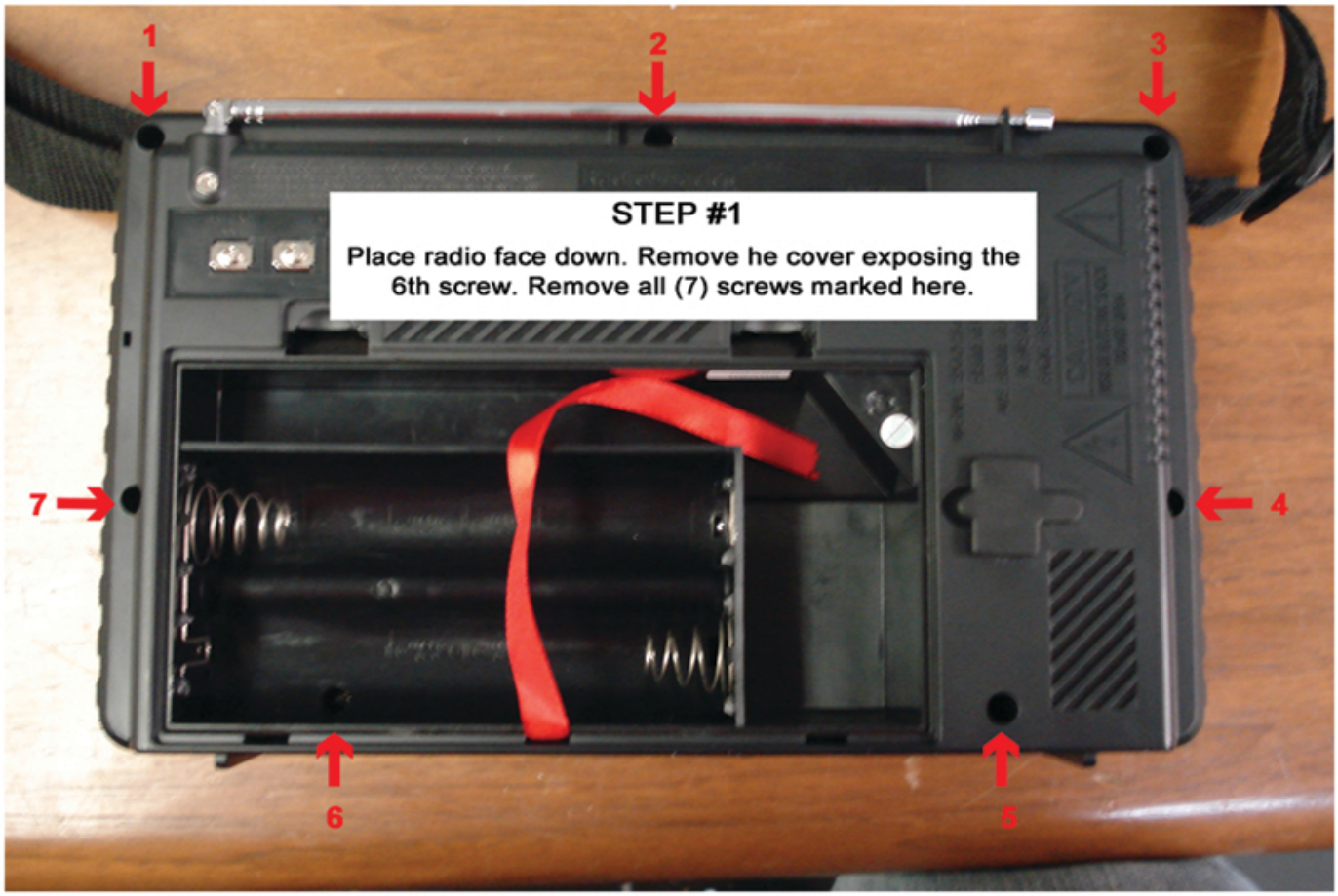
For a more detailed discussion on building a GhostBox, please read:

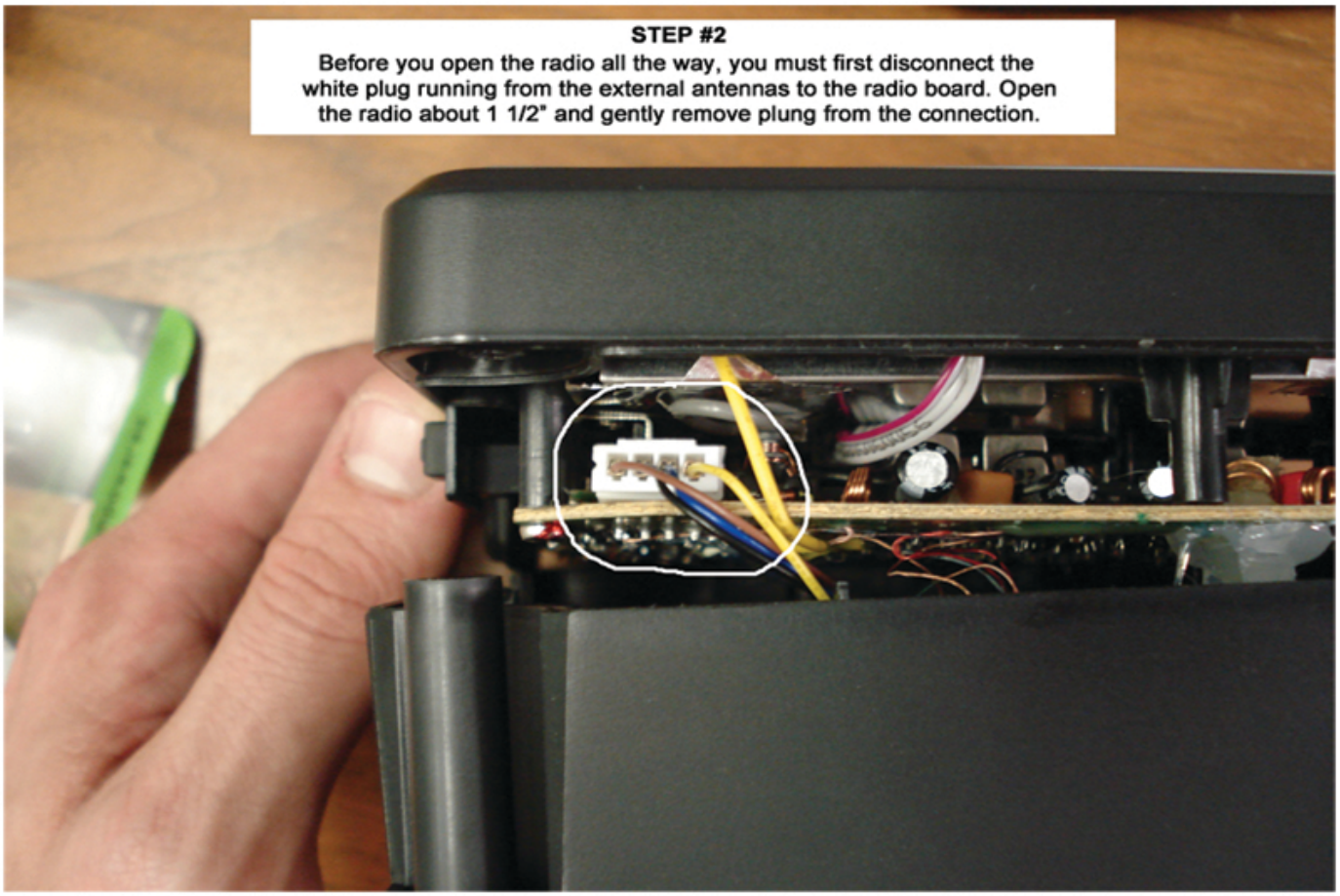
How To Build a Ghostbox (pt1) Radio Preperation

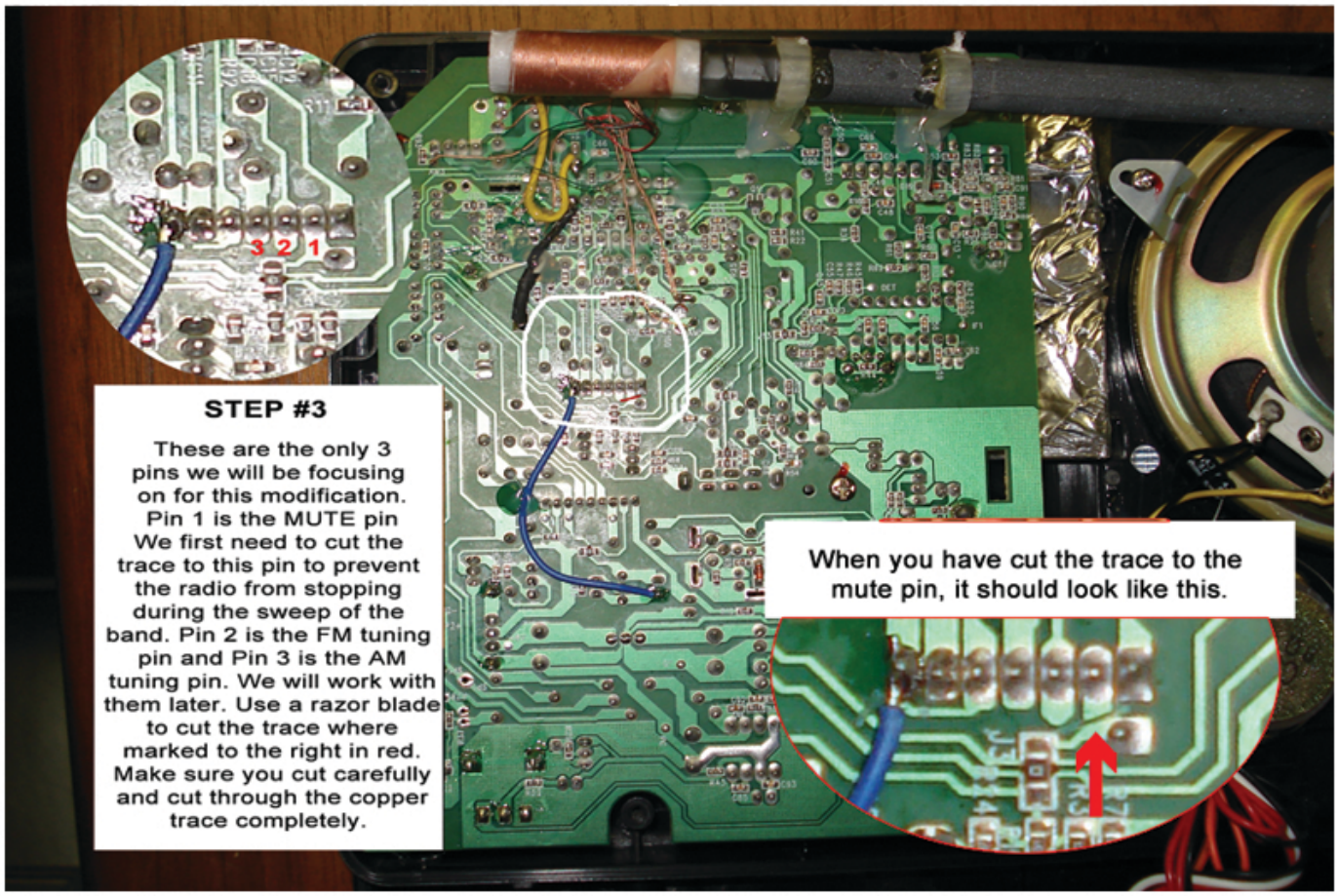
How To Build a Ghostbox (pt2) Sweep Circuit

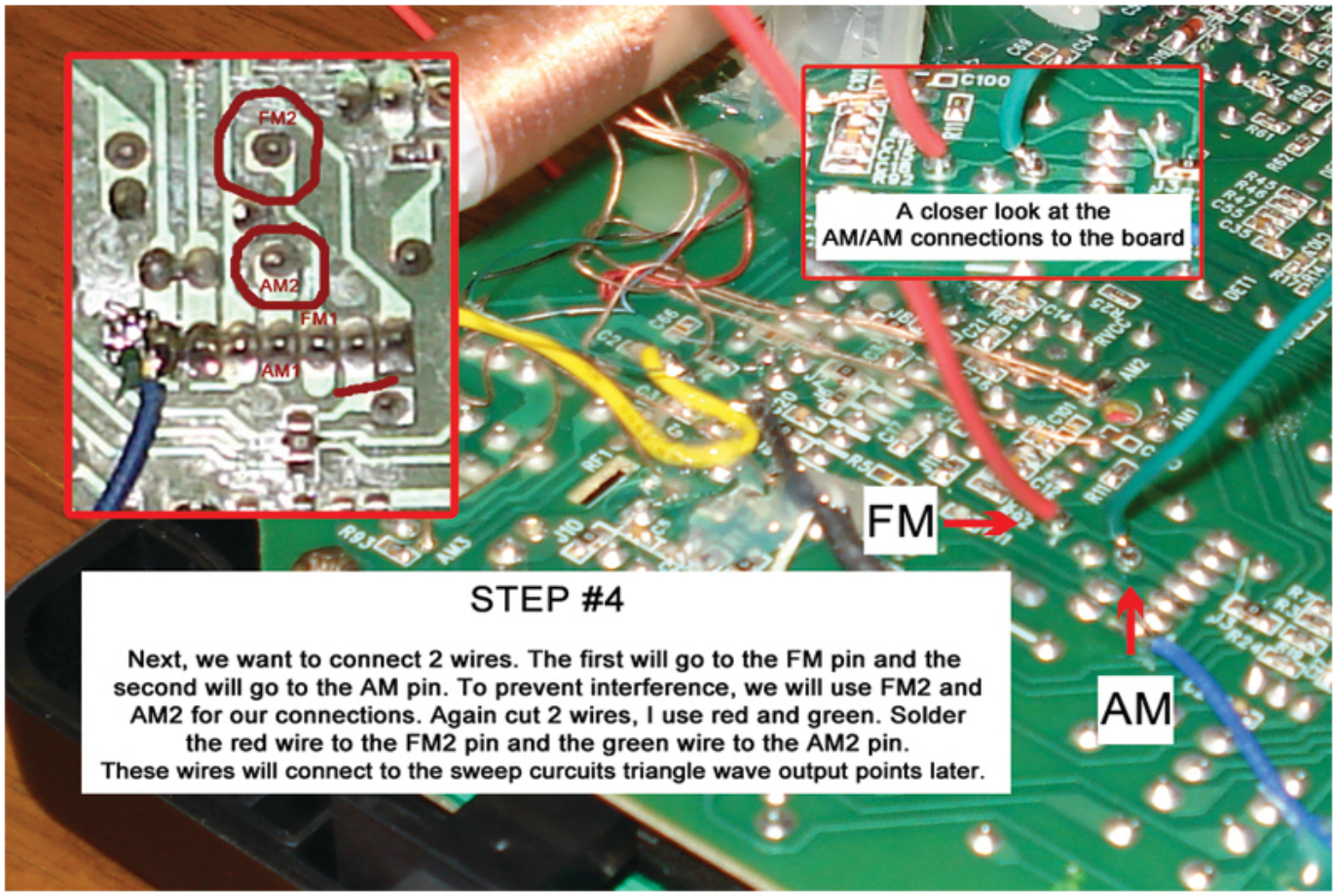
If you have any questions or need tech support with any of the CGB boxes, please contact Chris at ghostbox2010@live.com.

Ghostbox Home Page


1
2
3
STEP #1
Place radio face down. Remove he cover exposing the 6th screw. Remove all (7) screws marked here.
7
4
6
5

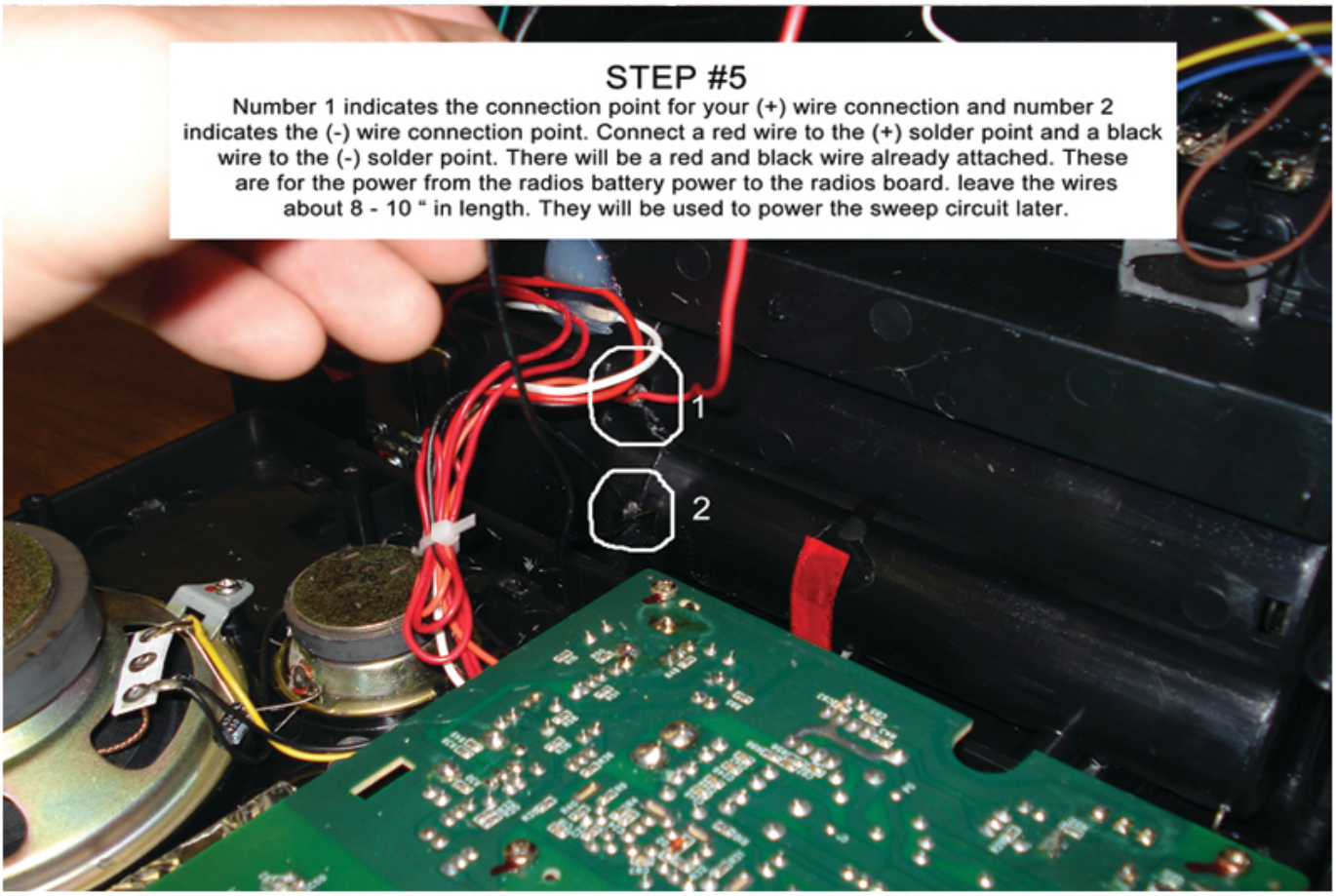

STEP #2
Before you open the radio all the way, you must first disconnect the white plug running from the external antennas to the radio board. Open the radio about 1 1/2" and gently remove plung from the connection.


3 2 1
STEP #3
These are the only 3 pins we will be focusing on for this modification. Pin 1 is the MUTE pin We first need to cut the trace to this pin to prevent the radio from stopping during the sweep of the band. Pin 2 is the FM tuning pin and Pin 3 is the AM tuning pin. We will work with them later. Use a razor blade to cut the trace where marked to the right in red. Make sure you cut carefully and cut through the copper trace completely.
When you have cut the trace to the mute pin, it should look like this.


FM2
AM2
FM1
AM1
C100
A closer look at the AM/AM connections to the board
FM
AM
STEP #4
Next, we want to connect 2 wires. The first will go to the FM pin and the second will go to the AM pin. To prevent interference, we will use FM2 and AM2 for our connections. Again cut 2 wires, I use red and green. Solder the red wire to the FM2 pin and the green wire to the AM2 pin.
These wires will connect to the sweep curcuits triangle wave output points later.

STEP #5

Number 1 indicates the connection point for your (+) wire connection and number 2 indicates the (-) wire connection point. Connect a red wire to the (+) solder point and a black wire to the (-) solder point. There will be a red and black wire already attached. These are for the power from the radios battery power to the radios board. leave the wires about 8 - 10 " in length. They will be used to power the sweep circuit later.

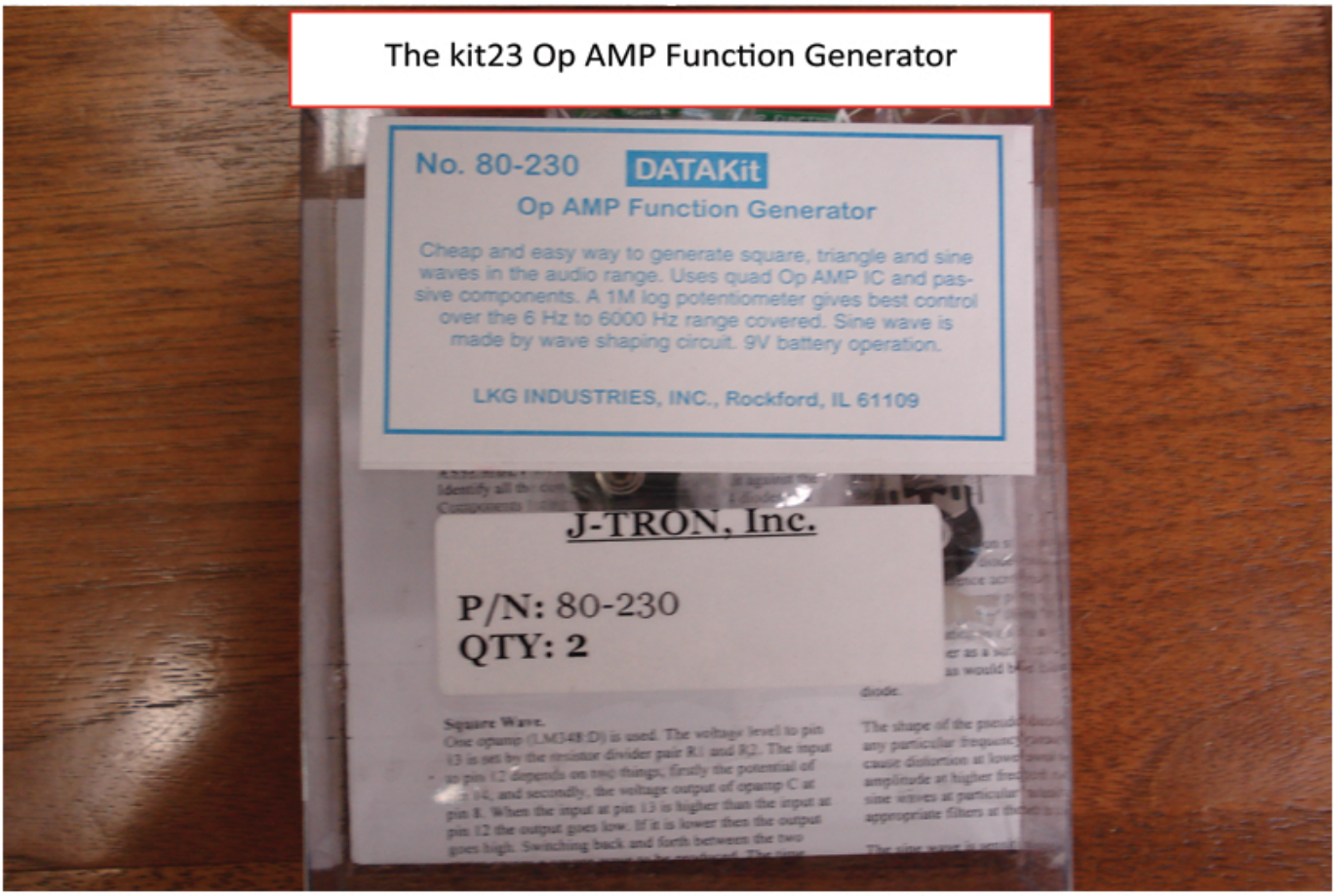


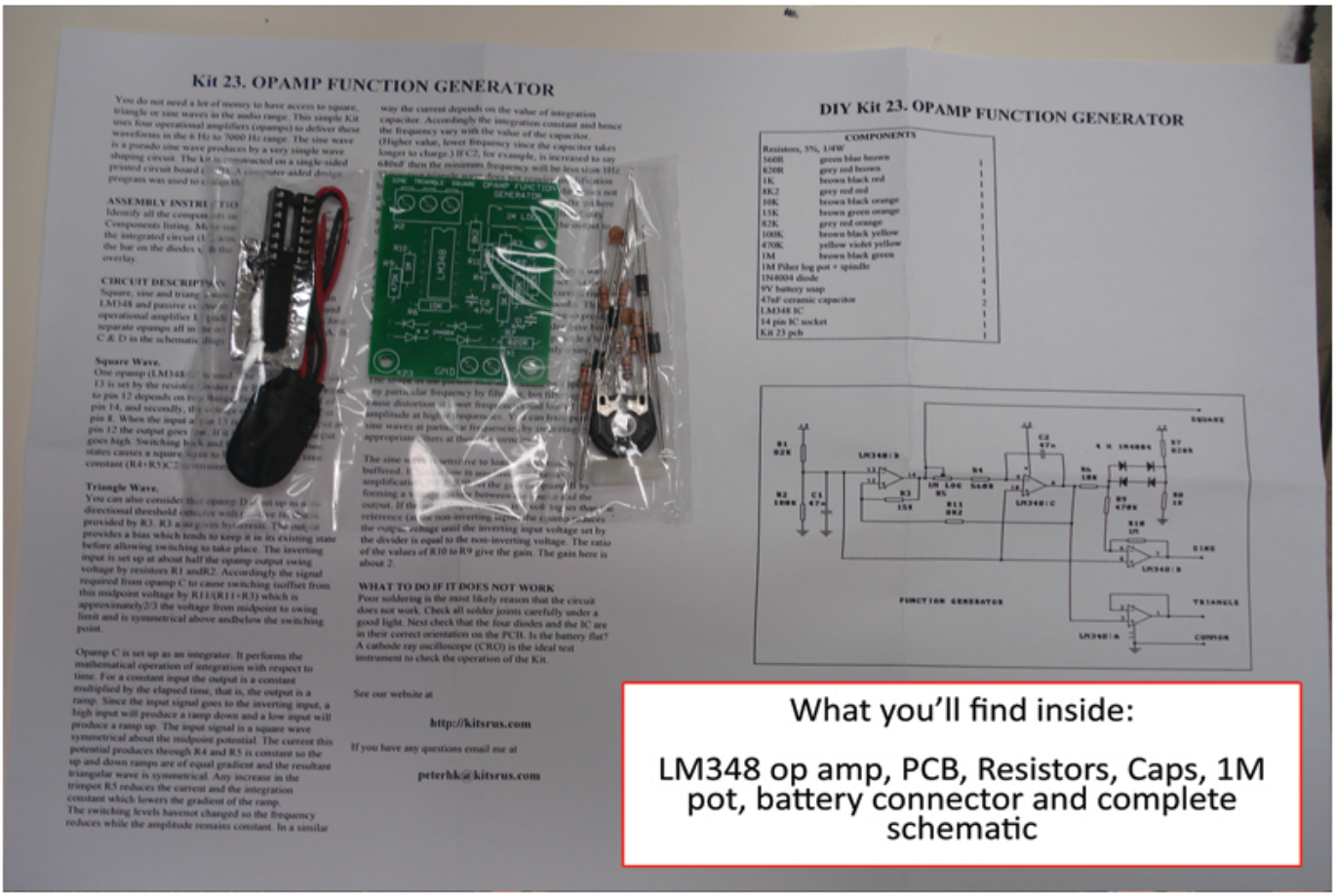
STEP #6

Next, we want to drill a 5/16" hole at the top of the radio for the potentiometer. We replace the plastic stock pot with a RadioShack 1M pot (271-0211). Be sure you drill about midway between the 2 screw locations, centering the hole from front to back. Before installing the pot in the hole, connect a red,green and black wire to the prongs of the pot. If you spin the prongs towards you in the picture from right to left you connect the red (R), green (M) and black (L). When the wires are connected, install the pot and turn prongs towards the back of the radio wall. This should look as it does to the right. You can leave these wires at 6" or so in length.

This is the last step in prepping the radio for the addition of the kit23 function generator

The kit23 Op AMP Function Generator



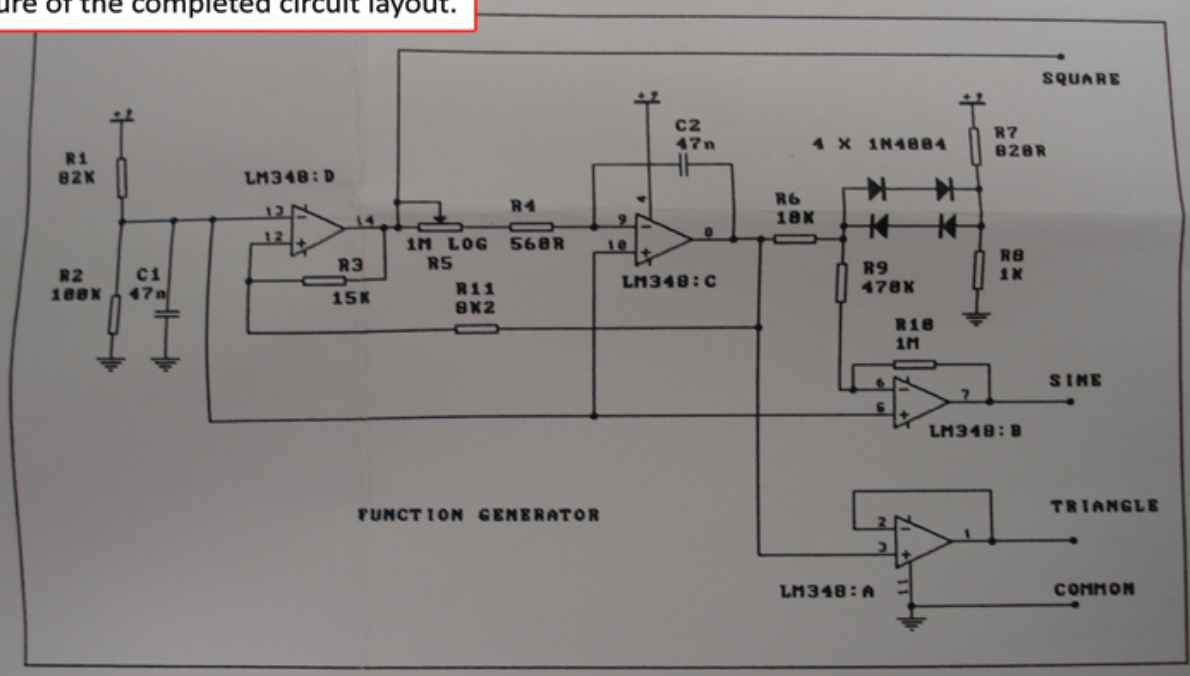


What you'll find inside:

LM348 op amp, PCB, Resistors, Caps, 1M pot, battery connector and complete schematic

Close-up of the schematic

If you can't read a schematic, don't worry. I will give a close-up picture of the completed circuit layout.

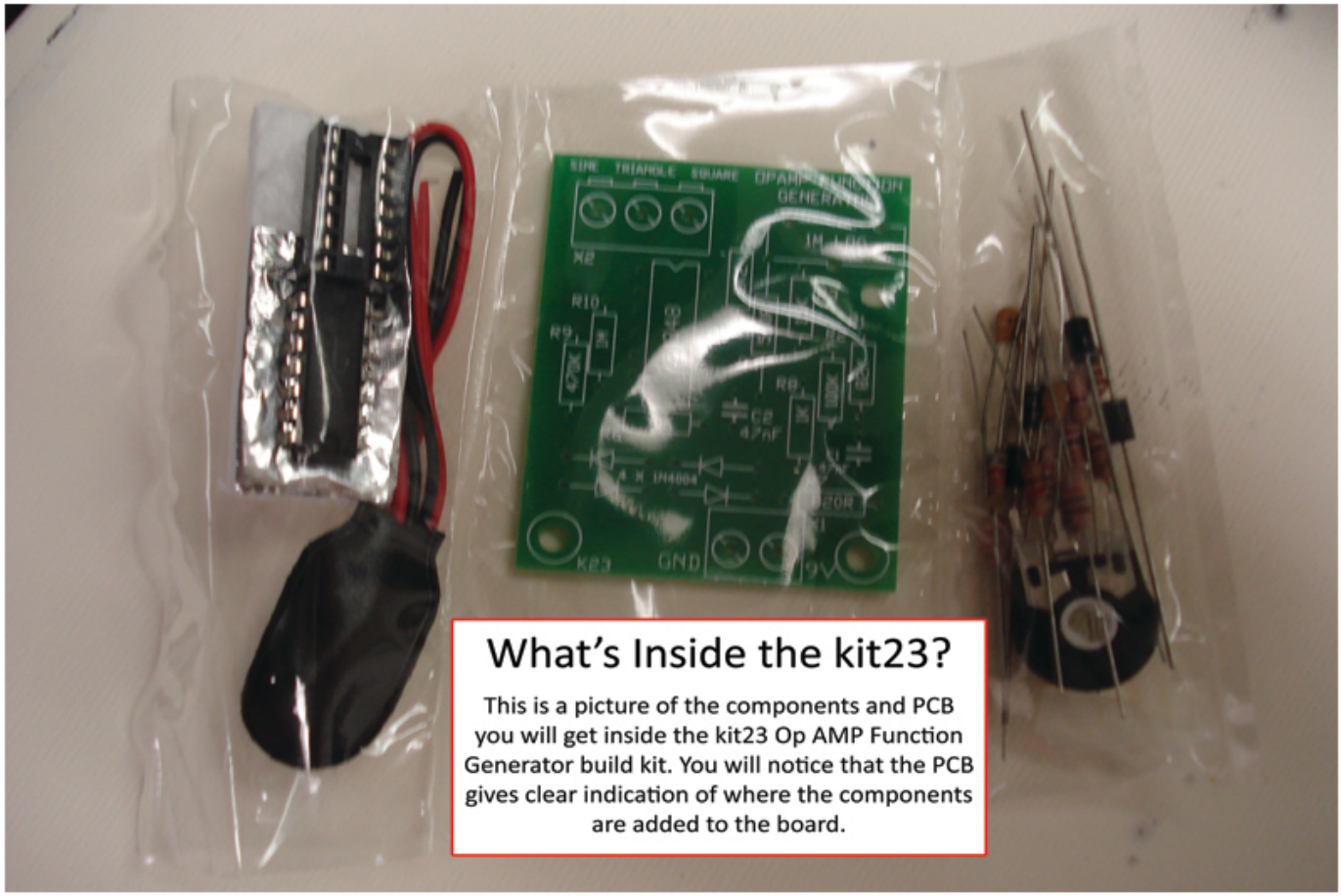


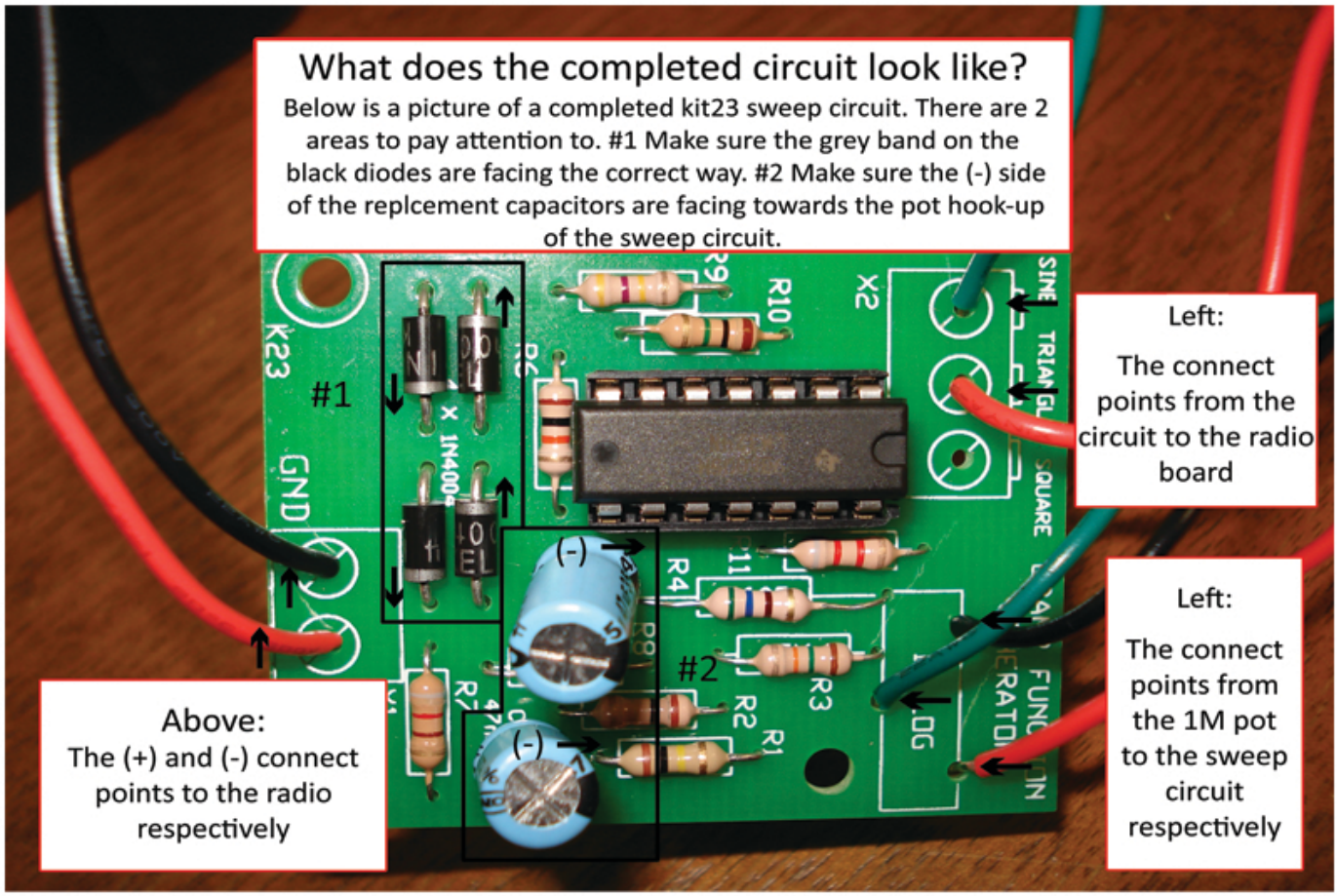
COMPONENTS

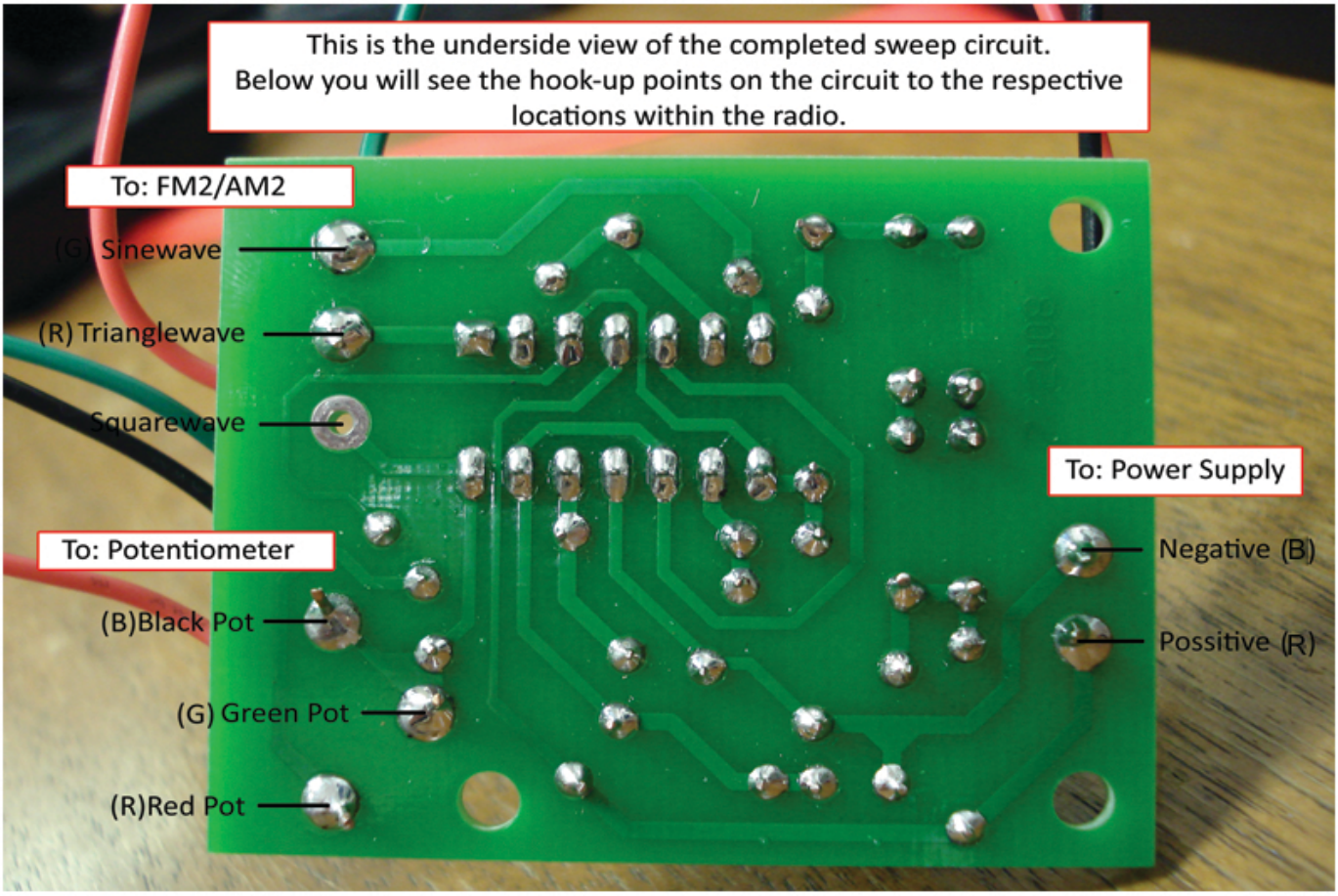
Resistors, 5%, 1/4W		
560R	green blue brown	1
820R	grey red brown	1
1K	brown black red	1
8K2	grey red red	1
10K	brown black orange	1
15K	brown green orange	1
82K	grey red orange	1
100K	brown black yellow	1
470K	yellow violet yellow	1
1M	brown black green	1
1M Piher log pot + spindle		1
1N4004 diode		4
9V battery snap		1
47nF ceramic capacitor		2
LM348 IC		1
14 pin IC socket		1
Kit 23 pcb		1

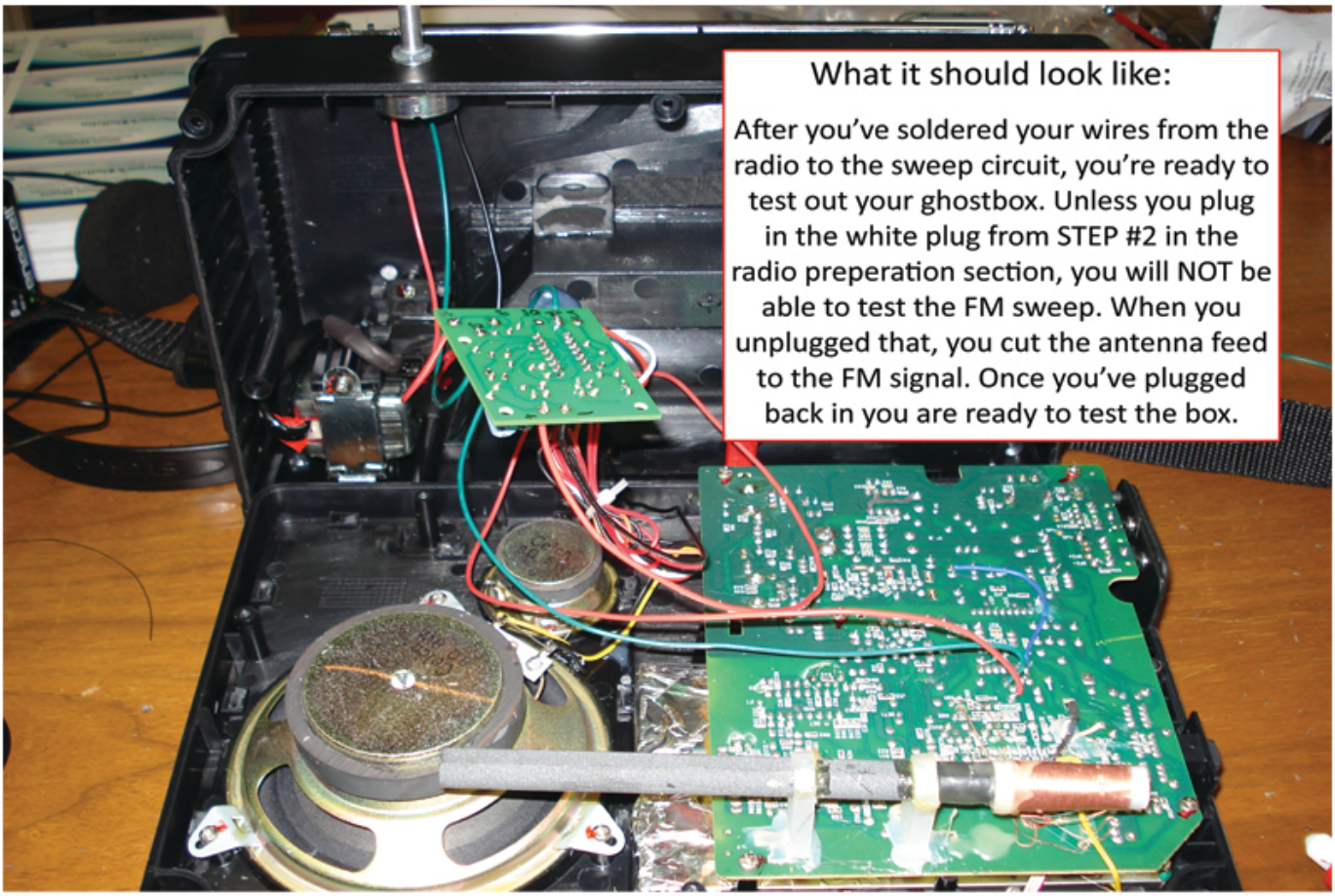
Pictured Here:

This is the value sheet that comes with the kit23 FG. You'll notice that the values are all layed out so you can easily pick out the correct value compnent and match it to the prpoer location on the PCB. We replace 3 stock items with RS replacements. We use a LM324 in place of the LM348 op amp. We use RS (272-1027) caps in place of the stock caps and a 1M linear taper pot (271-0211) in place of the plastic 1M pot spplied.


What's Inside the kit23?
This is a picture of the components and PCB you will get inside the kit23 Op AMP Function Generator build kit. You will notice that the PCB gives clear indication of where the components are added to the board.


What does the completed circuit look like?
Below is a picture of a completed kit23 sweep circuit. There are 2 areas to pay attention to. #1 Make sure the grey band on the black diodes are facing the correct way. #2 Make sure the (-) side of the replcement capacitors are facing towards the pot hook-up of the sweep circuit.
Left:
The connect points from the circuit to the radio board
Left:
The connect points from the 1M pot to the sweep circuit respectively
Above:
The (+) and (-) connect points to the radio respectively
#1
#2
K23
GND
X2
R9
R10
R4
R3
R2
R1
(-)
(-)


This is the underside view of the completed sweep circuit.
Below you will see the hook-up points on the circuit to the respective locations within the radio.
To: FM2/AM2
(G) Sinewave
(R) Trianglewave
Squarewave
To: Potentiometer
(B)Black Pot
(G) Green Pot
(R)Red Pot
To: Power Supply
Negative (B)
Possitive (R)


What it should look like:
After you've soldered your wires from the radio to the sweep circuit, you're ready to test out your ghostbox. Unless you plug in the white plug from STEP #2 in the radio preperation section, you will NOT be able to test the FM sweep. When you unplugged that, you cut the antenna feed to the FM signal. Once you've plugged back in you are ready to test the box.


CGB5
5.20.2010
1/6
2/7
3/8
4/9
5/0
LIGHT
SLEEP
POWER
AUTOSCAN
DOWN
UP
MEMORY
SHIFT
BASS
WIDE
NORMAL
TUNING
TREBLE
MIN
MAX
VOLUME