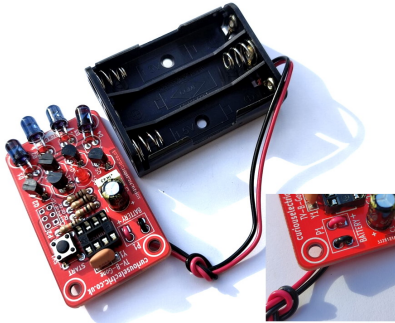


Step 10: Wire up Battery Box

Battery cable goes through large hole then back in to PCB.
Red: +ve Black: -ve



Step 11: Add 3 x AAA batteries and test.

Insert 3 AAA batteries into the battery box. You should see the 3mm red LED flash. This means the unit is working. It will flash for around 60 seconds and then switch off. Press the push switch button to start the sequence again. The device sends out all the TV codes in sequence. Pressing the button will cause it to start the sequence again.



Use a camera to check IR LEDs working



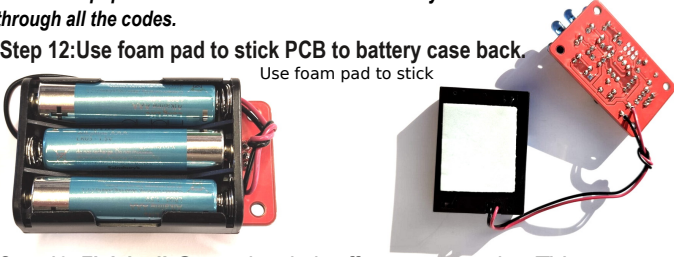
Note: This is viewed through a camera
You would not normally see the LEDs flash.

Use a digital camera to check the IR LEDs are working. A phone camera works well for this. You should see the LEDs flashing purple, which proves the device is sending IR codes.

Note: Most popular TV codes are used first but it may take over 60 seconds to scroll through all the codes.

Step 12: Use foam pad to stick PCB to battery case back.

Use foam pad to stick



Step 13: Finished! Go and switch off some annoying TVs....

This kit is based upon a circuit originally produced by Mitch Altman:

http://www.tvbgone.com/cfe_tvbg_main.php

The circuit is based upon the kit by Adafruit Industries:

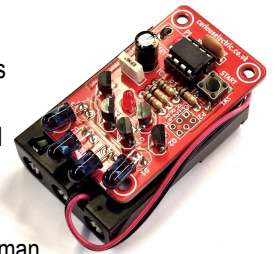
<http://www.ladyada.net/make/tvbgone/index.html>

Kit developed by Matt Little: www.curouselectric.co.uk



TV-B-Gone KIT Instructions

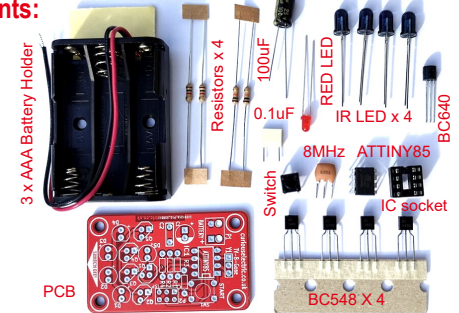
The TV-B-Gone switches off TVs from a distance of up to 30m. It sends out the 'standby' command for the top 125 European and 125 US TV specifications.



It is based upon an idea and product from Mitch Altman.

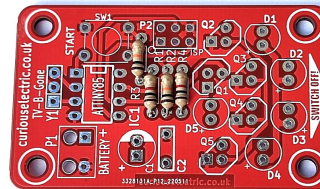
In use: Point at an unwanted TV. Press the black button and the red light will flash, showing it is sending out the various TV codes. The most popular codes are sent first, but it takes over 60 seconds to run through all the codes.

Components:



You will also need: 3 x AAA batteries

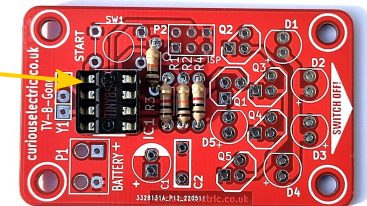
Step 1: Solder the resistors



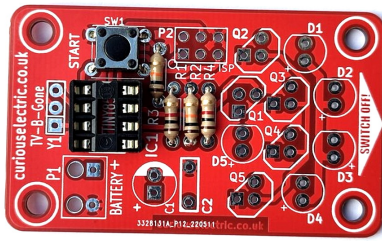
R1	1kΩ		Br Bk Rd Gd
R2	10kΩ		Br Bk Or Gd
R3	10kΩ		Br Bk Or Gd
R4	1kΩ		Br Bk Rd Gd

Step 2: Solder the IC socket

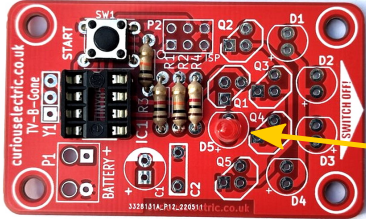
Check notch!



Step 3: Solder the push switch



Step 4: Solder the red LED

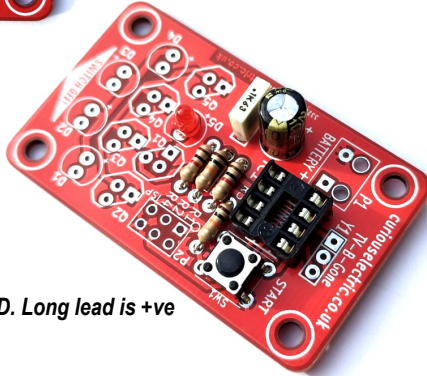


*Note polarity:
flat side negative,
long leg +ve*

3mm Red LED

Step 5: Solder the capacitors

- C1 100u 
- C2 0.1u 

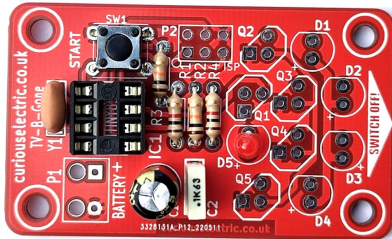


Note:

*Polarity on C1: White stripe is GND. Long lead is +ve
C2 is marked ".1J63"*

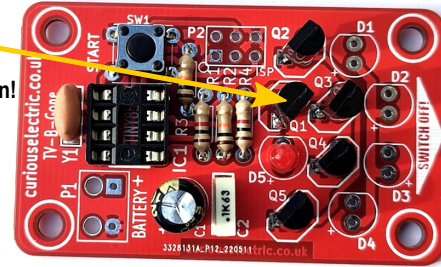
Step 6: Solder the 8MHz resonator

Note: The resonator can be inserted in either direction.



Step 7: Solder the transistors

Transistor Q1
Type: BC640
Check orientation!

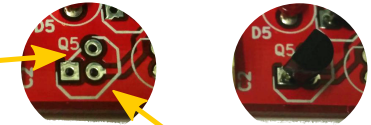


Transistors Q2-5
Type: BC548
Check orientation!

Transistor orientation:

Flat side of transistor here

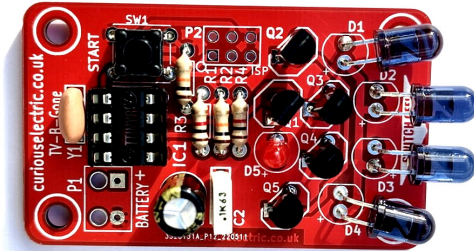
Round side of transistor here



Step 8: Solder the infra-red LEDs

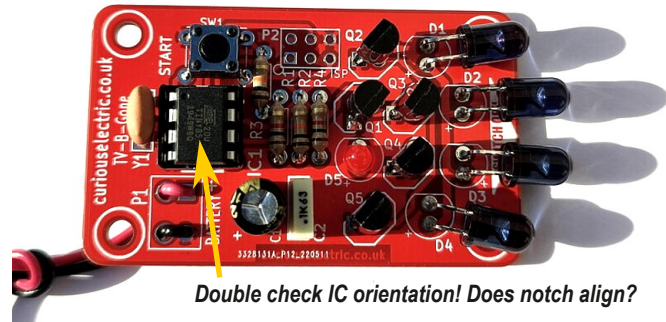


Use pliers to bend LED leads 90 deg.



Note polarity: flat side negative, long leg +ve

Step 9: Insert programmed ATTINY85 IC into socket.



Double check IC orientation! Does notch align?