

Making the Doppler Ball

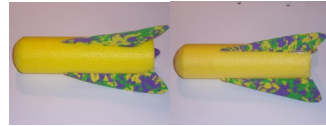
This Doppler ball is made from a cheap toy that is available in many of the \$2 shops or similar stores.

You will need:

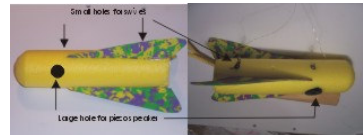
a soft projectile(available from \$2 shop or similar), piezo speaker, 9V battery and connector, switch, connecting wire(available from electronics suppliers), three fishing swivels, paper clips, rope for handles and a hot glue gun.



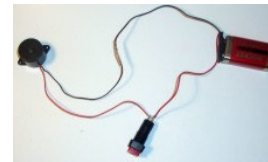
The original toy has curved fins that need to be straightened. Cut the fins with a craft knife and reglue straight with a hot glue gun



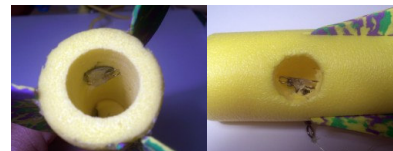
Once the fins are straight holes need to be cut in the sides, two to attach the rope and one large one to fit the piezo speaker. Cut the piezo hole between the fins as far forward as you can. Keep the hole a little smaller than the speaker to make a tight fit.



Wire the speaker in series with the 9V battery and a switch. Make sure you have enough wire so that the components can be inserted individually without breaking the circuit.



Attach the swivels to the projectile, using washers and hot glue to hold in place.



Place the piezo speaker into the hole, making sure it is a firm fit, then the battery and switch last. Push all the components as far forward as possible, this will prevent tumbling as it flies.



Practice using your Doppler ball

