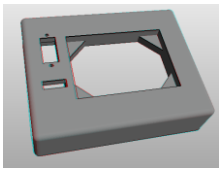
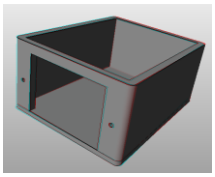
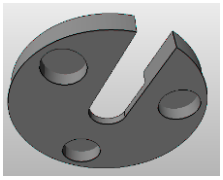
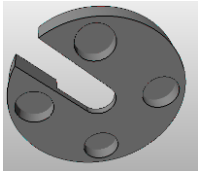
Building a MyLocoSound Drop In Soundbox

Items Required

- MyLocoSound British or Universal Steam soundcard version 21 or later
- 3D prints using files downloaded from the Drop In Soundbox page at www.mylocosound.com.

- ABS-230-RC 2 watt 8 ohm speaker

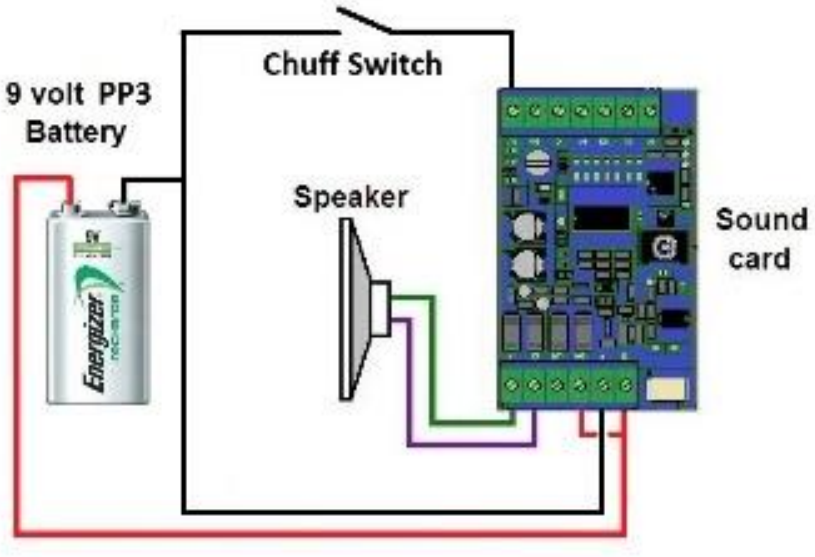
- Bulgin 0023 PP3 (9v) battery holder

- Multicomp DPDT slide switch

- 10mm Miniature Reed Switch

- Up to four 5mm diameter magnets
- Low voltage wire, solder, bathroom silicon or similar, superglue

Wiring diagram



How many magnets?

The steam chuff is synchronised to match the speed of the locomotive by locating a reed switch positioned close to the back of a tender or van wheel and then glue magnets around the back of the wheel, using the 3D printed discs, as follows:

The wheel is the same diameter as the loco driving wheels	4 magnets 90° apart
The wheel is three quarters the diameter of the loco driving wheels	3 magnets 120° apart
The wheel is half the diameter of the loco driving wheels	2 magnets 180° apart

Construction

1. In the upper body, fix the slide switch, the IR receiver and the speaker in position.
2. Complete all connections shown in the wiring diagram. Be sure it include the wire between the soundcard B+ and M1 terminals. The soundcard can remain loose in the upper body half.
3. Install the battery holder.
4. Glue the selected number of magnets to the 3D printed holder.
5. Attach the magnet holder to the back of the selected wheel using BlueTac or similar.
6. Solder the reed switch to a pair of wires which are long enough to reach up to the soundbox. The reed switch can be placed inside a piece of square section styrene to protect it and to make it easier to glue it under the wagon/tender floor. The magnets need to pass within 2mm of the reed switch.
7. Test the operation of the unit.
8. Join the upper and lower halves of the soundbox using bathroom silicon or similar and leave to set over night.