

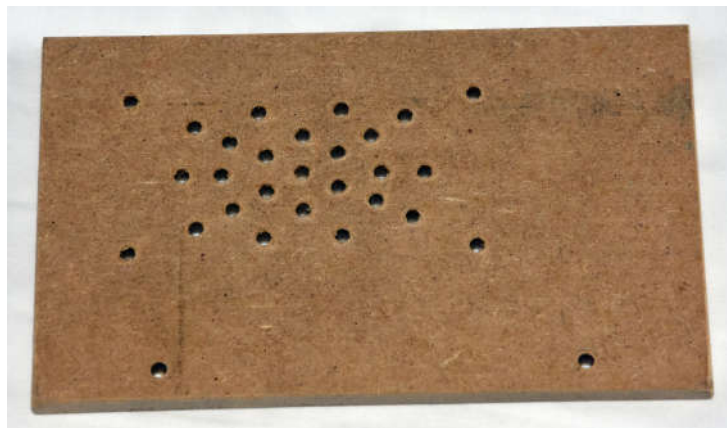
## Baseboard.

It is useful to have a base board onto which to mount the various circuit boards and control panels for the radio project. This does not have to be a complex structure and the original was made from an offcut of plastic coated chip board. The dimensions of the baseboard were approximately 40cm × 16cm × 1.5cm.



For any radio system it is essential to be able to hear the radio signals that are being received and so a loudspeaker was attached to one of the end panel of the baseboard. The speaker was 'liberated' from an old television - almost any 8Ω or 4Ω speaker would be suitable. Although holes were drilled in the side panel of the baseboard, the number is not critical as sound will be radiated from the rear of the speaker as well as the front. This has the effect of significantly reducing the low frequency response of the speaker, but since most information in radio signals is in the frequency range of 200Hz to 3kHz, this is actually an advantage.

The side panels were made from 6mm MDF and were 10cm tall by 16cm wide.



End panel made from 6mm MDF and drilled for loudspeaker.

With any radio frequency systems it is useful to have a large conducting surface connected to 0V which will act as a low resistance and inductance path to the circuit boards of the system. Traditionally this would be achieved by making the case from aluminium but for this system the baseboard was covered with strong aluminium cooking foil. The foil was attached to the baseboard with Pritt Stick, and should extend down the sides so that the control panels can make 0V/ground connections to the foil.

Each of the end panels were attached to the base using two 30mm screws. The actual size does not matter, though if longer screws are used it is worth drilling small pilot holes into the baseboard to stop it from splitting.



Baseboard covered in aluminium foil with end panels attached and showing the foil extending down the sides of the baseboard.