

Making printed circuit boards for "one offs" is a laborious and often unnecessary past time. One alternative method is to use board "copper side up". The now famous "Manhattan" method is to superglue small pads of PCB offcuts where components joints are needed. The copper sheet underneath forms the ground plane.

However, I've never had a lot of success gluing anything other than myself and prefer to cut small islands with a modified wood drill.



Tip end.

The sketch above shows two things:-

1. Drawing really isn't my strong suit.
2. The drill originally has a central point and two side cutting edges.

To modify the drill, I ground the centre point so that it was the same length as the side edges. Then I removed one of the edges as the photograph below shows:-



The photograph below shows an island cut using the tool. It helps to drill a small pilot hole for the tool centre to spin in:-



This method can give the constructor complete freedom of layout. You can cut a few pads, mount some components, and then cut a few more. The tool can simply be twisted by hand - just cover the shank with tape to avoid cut fingers.

- G4WIF