

ASSEMBLY GUIDE FOR TAPUINO PCB V1.4 in PP9 BOX v1.0

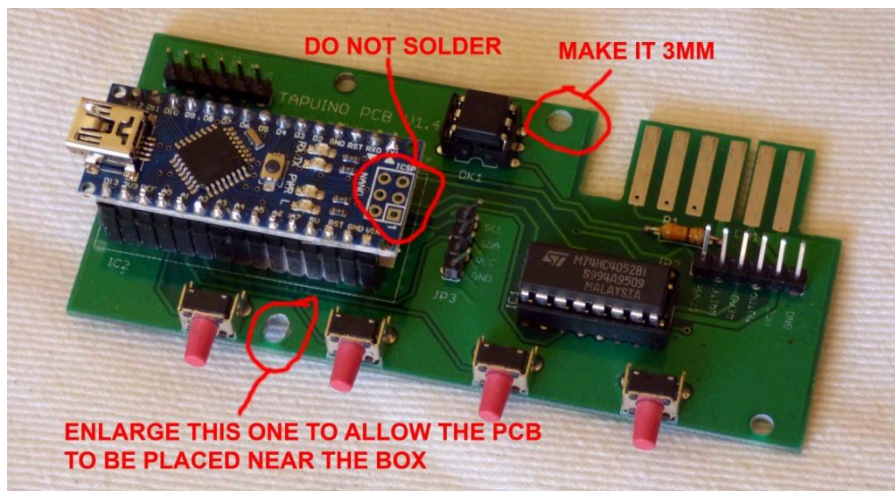
BY spcbm

Thanks to all for your confidence in the Project, specially to sweetlilmre.

PLEASE BE EXTREMELY CAREFUL TO AVOID INJURY.

This is how I did the assembly, you may have a better way to do, just use it as a help.

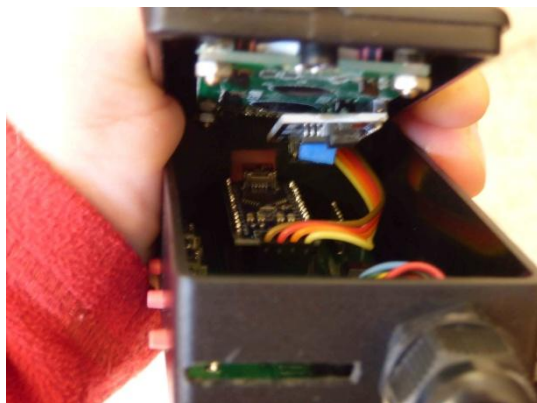
Before starting, this PCB has the holes 2.8mm diameter, so you may need to make the holes 3mm for standard M3 screws and standoffs. If you plan to use the recommended PP9 box you will need to do the following:



Solder all the components to PCB. Be carefull to align the buttons.

Do not solder the 6 pin header on Arduino or it will touch the LCD later.

If possible do not use socket for it, you will have more room for LCD and cables.



Drill the holes for LCD on the cover, you can use the template.

3mm drill for the 4 screws and 6mm drill for the rectangular hole.

I used wood drill that is OK for plastic also.

Verify your LCD to have the same layout before drilling. You may want to place LCD a little up instead of centered to avoid the I2c board touching the arduino.



After a bit of sanding



You need to countersink the 4 holes, use a 6mm drill (not for wood now)


If you do not have a stationary drill, do it with your hands, otherwise you may make a 6mm drill.

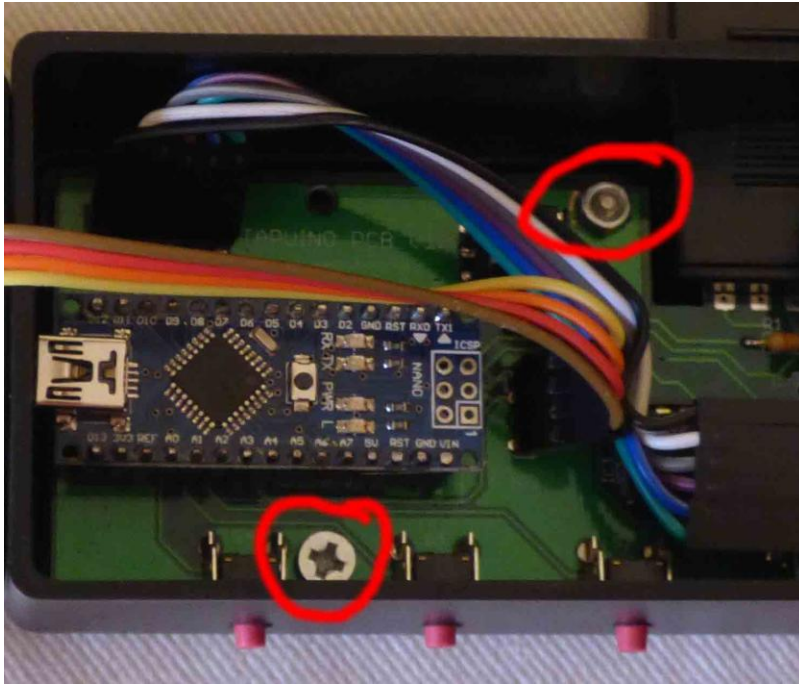
Using 4 standoffs M3 male-female, nuts and very short screws and you are done with LCD.

Time to make drills for the buttons, use the template and a 4 or 4.5mm drill.

Check carefully allignement before drilling.



The PCB should fit now inside the box, put the 3mm sheet metal screw thread  near the first button and thread it into the plastic standoff of the box. Then mark the hole position for a new standoff you need to add.



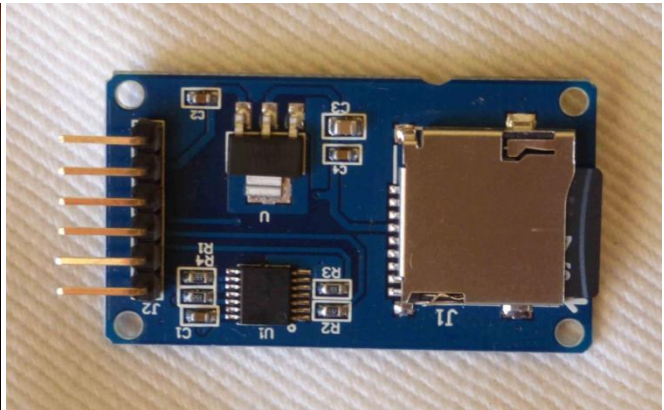
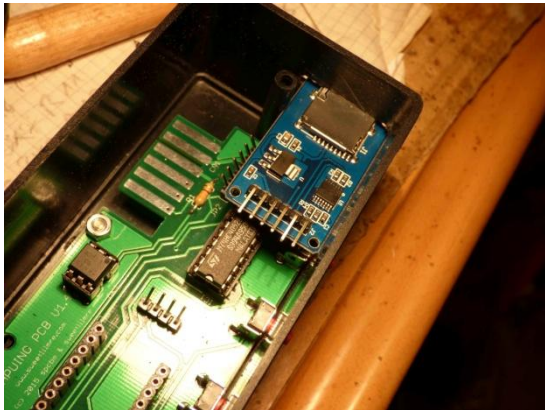
As the standard standoffs are 5mm just add 2 washers to reach 6mm that is the height of the plastic one of the box, just to keep PCB horizontally.



Now make the holes for datasette connector and USB . Always check before drilling.



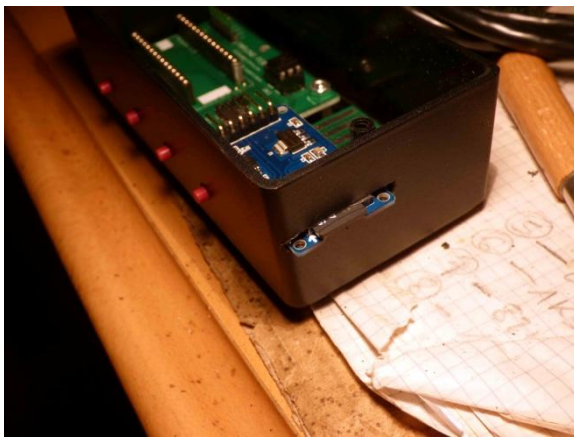
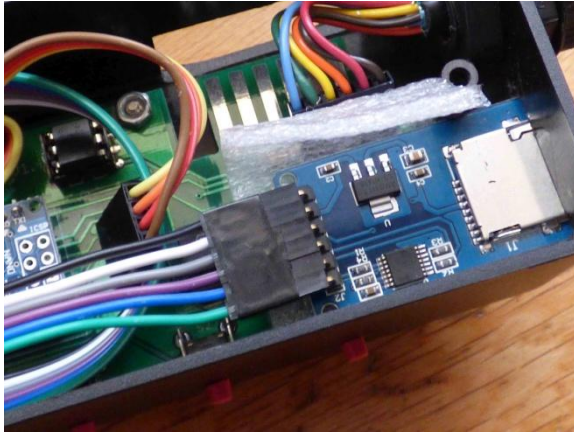
I've found this place to put micro SD shield. You need to make a small notch in the PCB



Verify that you can insert and extract SD card before making the notch.

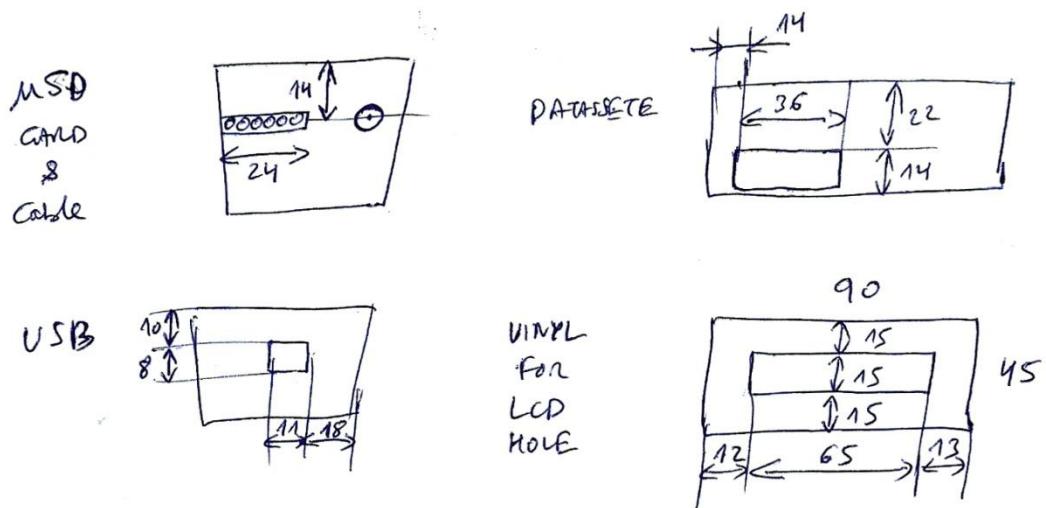
Then you can make the hole, I used 3mm drills for this.

You can put a piece of plastic under SD shield to avoid shortcircuits.



These are my hand drawings for this holes, take as reference, but always check before drilling.

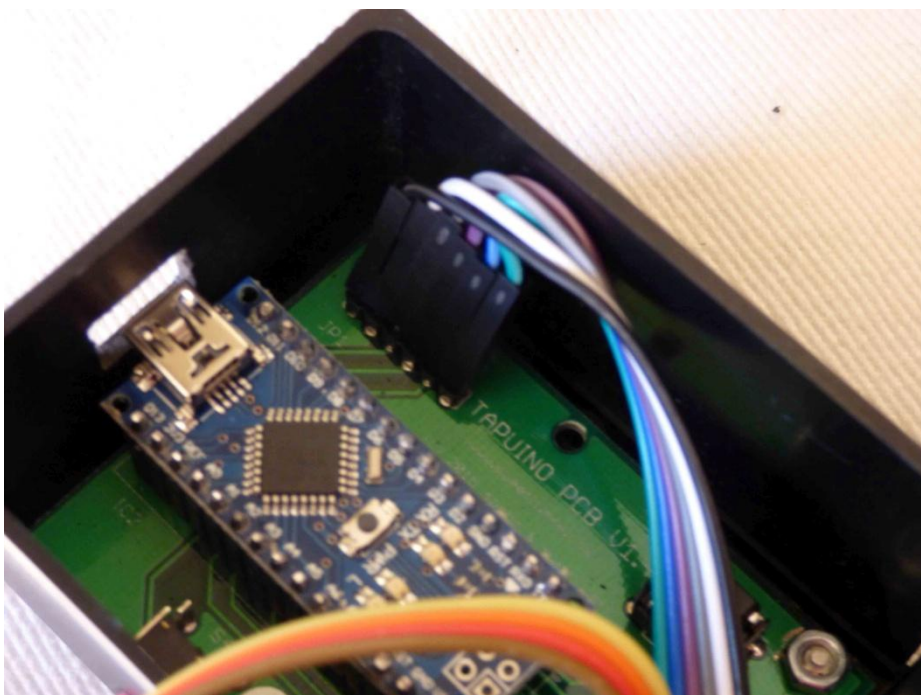
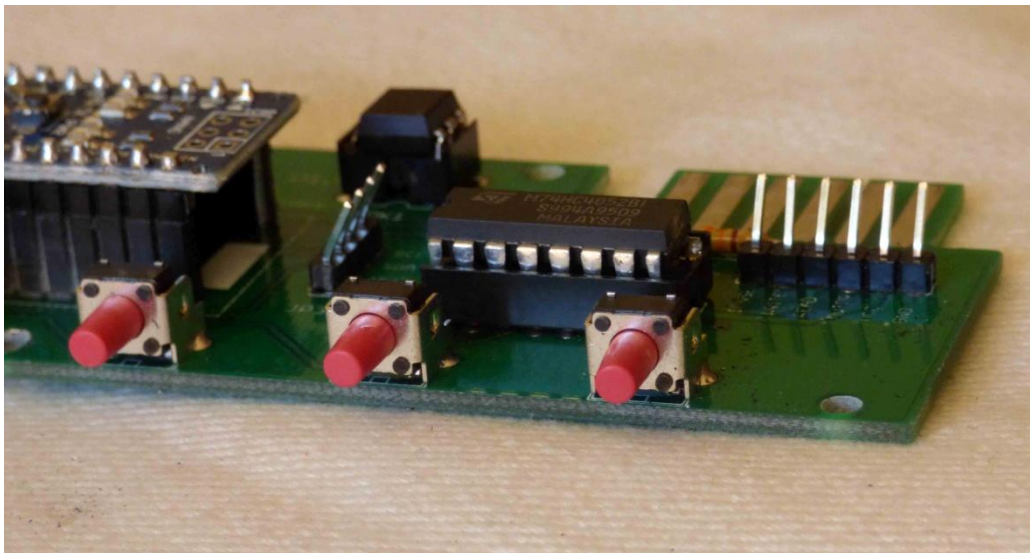
Datassette hole may need to get wider to connect devices other than datassette.



And now make the hole for the cable entry.



You may need to bend some connectors to fit all inside.



Solder the connector that goes to C64 and fit in the DB15 cover. You may add a plastic between pins 2&3 to avoid wrong connection.

Connect all the cables and you are ready to LOAD ;-)

