V1A_X PCB as of 9/1/23

This is a few notes about the new V1A_Rx DDS pcb.
First off, the x will denote the revision, we are currently on rev 4. (V1A R4)

Mute:
V1A R4 has a modified mute circuit.
J1 grounds one side of the relay, so you can simply take the RX wire from the radios microphone jack and run it to the (Mute) connection nearest the relay.
This allows the RX line of the radio to be at ground when receiving. When transmitting, this line comes off of ground, the same as the microphone switch dose it, but when releasing PTT, the relay is delayed before going back to ground. This eliminates the noise sometimes heard in the speaker.

If you need to have the RX line run back to the microphone, simply remove J-1 on the DDS pcb and use both (Mute) connections. This allows the microphone switch to act normally but gives a delay to the RX line so the noise is muted. FG1

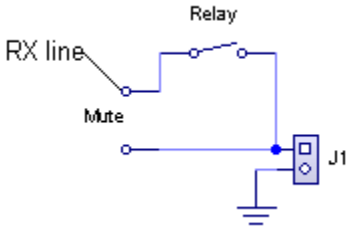
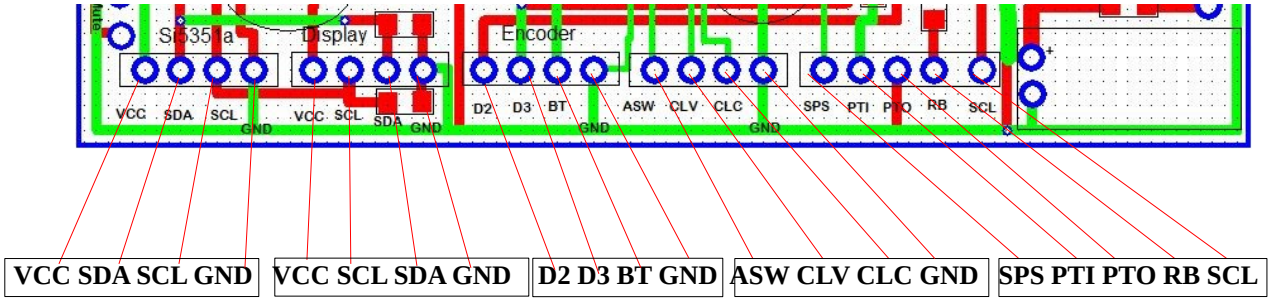


Figure 1: FG1

Silk Screen:
The silkscreen was blurry on V1A R5, please use the diagram below for reference of the wiring connections until V1A_5 is corrected.



Color Code:

VCC- 5V RedBlk / SDA-Data ORN / SCL-Clock BLU / D2-Encoder BRN

D3-Encoder WHT / BT-Encoder Button GRN / ASW-Auto Scan Switch BluBlk

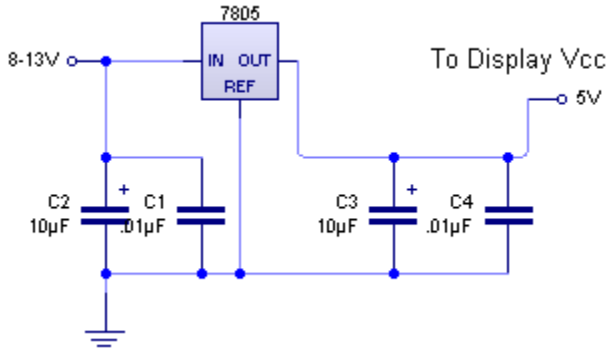
CLV-Clairifyer 5v RedBlk / CLC-Clairifyer Center GRY / SPS-Spectrum Scan Wht/Blk

PTI-Push to talk in Orn/Blk / PTO-Push to talk out BrnBlk / RB-Grey

SCL-Scan Logic YelBlk

2.4” display reset line:
Rev 5 has the RST line available as standard for these boards for use with the 2.4” OLED display. Notice, just below the upper right mounting hole (2.4 RST)

NOTE: not to use the Vcc of the kit, to power the display, instead use a separate 5 volt regulator to power the 2.4” display.
Example:



If you have any subsections, feel free to send them in, toby@troyradio.net

73,
N5SIM