

## Commodore PET Companion KIT Assembly Guide

The completed manual can be found on GitHub

https://github.com/RudyRetroIntel/Commodore-PET-Companion

YouTube channel: https://www.youtube.com/@RudysRetroIntel

These are the recommended order for component installation.

- 1. Clean both sides of the board with Ethyl Alcohol 90% or higher. Wipe and clean all areas of the board for best results when soldering
- Check to see which side of the board the components need to be install on. The correct side has a picture of all
  the components on it. The back side, where no components are to be installed, has the pin out labeling for the
  RGB2HDMI connector. This step is critical as installing components in back side of the board will not work
- 3. Install and solder the all resisters. (100k x 2, 680k and 3.3k)
- 4. Install and solder the diode (1N4007). Ensure the band on the diode face the same way as indicated on the board. Failure to do so will result in no video
- 5. Install and solder the capacitor (2200pF)
- 6. Install and solder the jumper blocks (2 x 2 pin headers)
- 7. Install and solder the sockets (2x 14 pin sockets)
- 8. Install and solder the potentiometer (10k POT)
- 9. Install and solder the Composite Out and Audio Out RCA jacks (RCA jacks)
- 10. Install and solder the DB9 male connector RGB2HDMI port
- 11. Install and solder wire that will go to the small board for the tape port (5VDC Input)
- 12. Install and solder the wire on the tape port adapter
- 13. Install and solder the 2x24 pin female edge connector (User Port). Ensure the connector is on straight
- 14. Install and solder the 2x6 pin female edge connector (Tape Port). Ensure the connector is on straight
- 15. Place the jumper onto the 2 pins where the header is located. Place the jumper to "Normal Video" for 9-inch screen PETs or set jumper to "Inverse Video" for 12-inch screen PETs. Failure to place this jumper will result in no video
- 16. With your screw driver and multimeter, adjust the 10k POT to read 2.8k ohms. This is the best place to start. Once PET is powered up, you can adjust for best picture
- 17. Connect the board to the PET User Port and to the Tape Port
- 18. Connect cables to composite out and to audio out
- 19. Connect cable to RGB2HDMI, if you have this unit. Not include\sold with this unit
- 20. Power on external monitor and audio devices
- 21. Power on Commodore PET
- 22. Once install testing are complete, go over the board with Ethyl Alcohol 90% or higher and wipe and clean all areas.
- 23. Ensure you read the full manual before operation as setting depend on which Commodore PET you are using