## GoDRIvE1200

## A1200 Floppy emulator:

(Also compatible with A500)

For A500/A500+ fitting, check appendix\*





**GoDRIvE1200** is a complete solution for people who want to have a floppy drive emulator in their A1200(or A500/A500+), but don't want to sacrifice the original floppy drive.

**GoDRIvE1200** lets you have both inside and switch between them on the go. Both act as DF0:

You can use either an FDD or floppy drive emulator, but **NOT** both at the same time.

#### Features:

- purposely designed PCB to fit on top of the 34 pin floppy drive connector and 4 pin power connector.
- ability to switch between both (FDD and GoDRiVE1200) on the go. Letting

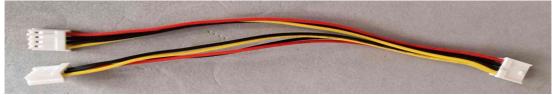
- you copy in between (FDD to .ADF and vice versa)
- Buzzer with amplifying circuit to hear emulated floppy sound's even through the case. (FF.cfg adjustable)
- No modification to the case needed.
- Used FFC tape instead of dupont connectors (much neater and easier to feed FFC through case vents).
- Breakout box with all necessary features (Large 1.3" OLED screen, rotary encoder with switch, activity LED light, drive selector and USB socket) all fitted on purposely designed PCB.
- In case you want to put addons (USB, Screen, Rotary encoder) in different position instead of using breakout box, all necessary connections are on the **PCB**
- Running the most popular FlashFloppy firmware, thanks to Keir Fraser. https://github.com/keirf/flashfloppy – strongly recommend to visit his page for the latest firmware updates, "FF" config guide and to donate his hard work.



#### GoDRIvE1200 set:

#### **Included:**

- GoDRIvE1200 PCB board
- FFC connecting cable 20cm
- Breakout box
- A500 Bracket
- Y power split cable



- Y-power split cable needed for A500/A500+

### **FITTING MANUAL:**

1.Remove all the cables and turn your A1200 upside down and remove 5 screws.



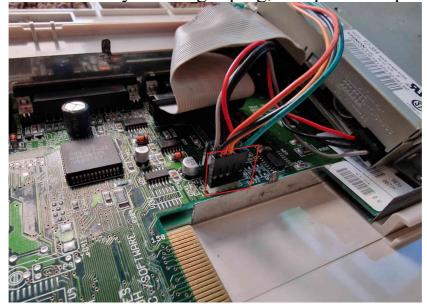
2. Turn it over and lift the top case and put behind as in the picture.



3. Lift the keyboard tab connector first before removing keyboard flexible tape. Now you can remove the keyboard.



4. Now disconnect activity LED light plug, and put the top case away.



5. Now you can remove the 34 pin data cable(**NOTE THE ORIENTATION FIRST!!!**) and FDD power cable completely. You should see this:



7. Now it's time to fit the new GoDRIvE1200 in place.

Make a note on both connectors marked in above picture as the emulator board sits directly on them both.

(You might need to remove A500 bracket from **GoDRIvE1200** power connector as it's comes fitted)

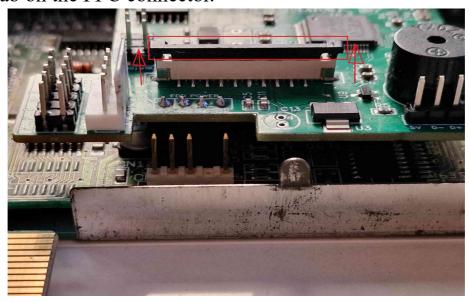


8. TAKE YOUR TIME, AND MAKE SURE IT'S ALIGNED CORRECTLY, AS ANY MISALIGNMENT (PARTICULARY ON THE 4PIN POWER CONNECTOR) WILL CAUSE DAMAGE TO THE EMULATOR/ MOTHERBOARD!!!



DOUBLE CHECK AGAIN YOUR FITTING AND IF YOU'RE SURE IT SITS CORRECTLY, MOVE TO THE NEXT STEP.

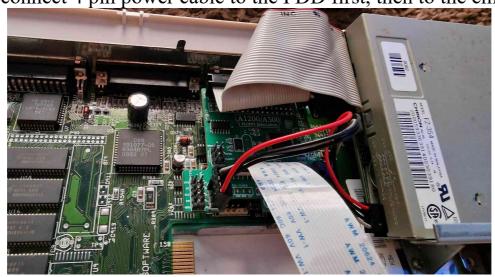
9. Now it's time to connect FFC tape to the **GoDRIvE1200** PCB. Lift the tab on the FFC connector.



10. Place FFC cable firmly into the FFC connector, BLUE side as shown in the picture below, then lock the FFC connector tab back in.



11. Reconnect 34 pin data cable to the floppy drive and then to the **GoDRIvE1200** board (NOTE PIN 1 ON THE GoDRIvE1200 IS ON THE RIGHT HAND SIDE CLOSE TO THE FDD). Make sure it sits firmly. Now reconnect 4 pin power cable to the FDD first, then to the emulator board.



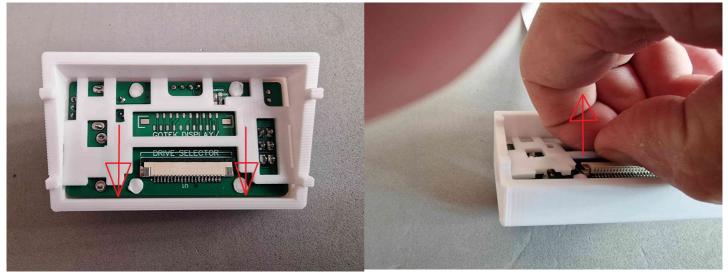
12. Now it's time to bring the top case back in, plug the activity LED lights connector and feed FFC cable through the vents as in the picture below.



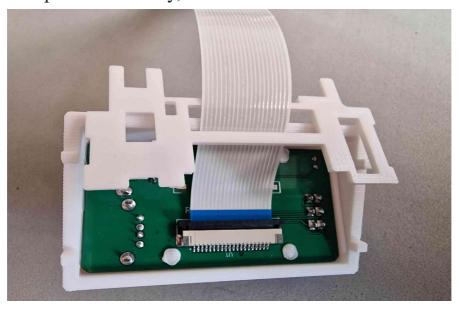
- 17. Bring the keyboard back and connect the keyboard flexi tape back and lock connector tab back in.
- 18. Close the case, making sure that FFC tape does not fall back inside the case.



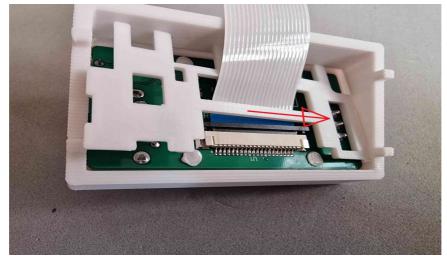
19. Time for a breakout box. 1<sup>st</sup>. Put it upside down and remove the bracket by pushing it down first. Then 2<sup>nd</sup>. Grab it in the middle and lift it gently until it comes off.



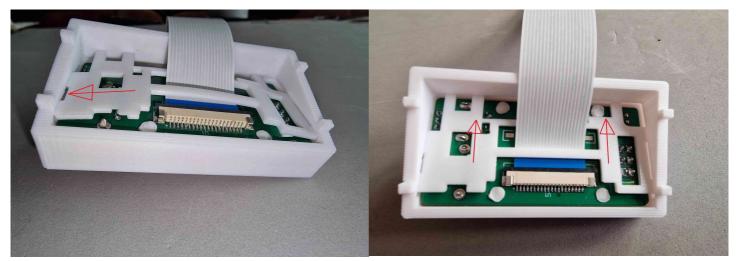
20.Lift FFC connector tab and place the bracket back on the FFC cable as in the picture before connected to the FFC connector. Then place FFC tape BLUE side as in the picture - firmly, then lock tab back in.



21. Time to put the bracket back in place. Slide one side into the groove as in the picture.



22. Grab in the middle as previously, keep it bowed and slide the other side back in the groove. And then slide the whole bracket back to the top groove.



23. Time to place the breakout box in place and test before we put A1200 screws back in. It should looks like this:



**Side note:** Due to the nature of 3D printing and the fact that you fit it on a 30 year old machine **discrepancies may occur**, therefore notches underneath breakout box are more likely for guidance only. I do recommend to use some sort of non invasive adhesive solution (double sided tape) to keep it in place.

24. If everything was connected correctly, you should be greeted with the FlashFloppy logo on the OLED screen like in the picture below.



And you should hear "famous" clicking sound either from **FDD** or **GoDRIvE1200** emulator buzzer depend on "drive selector switch" position.

Time for a quick test before putting everything back together. Prepare known working floppy disk and USB thumbstick FAT32 formatted with couple of .ADF images.

Plug USB thumbstick to the right side of the breakout box.



.ADF image names should appear on the screen. By using a rotary encoder choose which file you want to load and check if loading correctly.

Once tested, move "drive selector" to FDD position and insert Floppy disk to check if loading correctly, if happy with the results you can finally put your case and screws back together!

- In any case if something not working correctly(either drive not responding correctly), check back all the connection fitted firmly and correctly.
- Each emulator is tested prior to shipping
- Everytime switching between drives you should re-insert either .ADF image or floppy disk as they might not appear automatically. (MCU dependant)
- I CAN'T BE HELD RESPONSIBLE FOR ANY DAMAGE OCCURRED TO THE GoDRIvE1200 OR/MOTHERBOARD CAUSED BY INCORRECT FITTING!!!

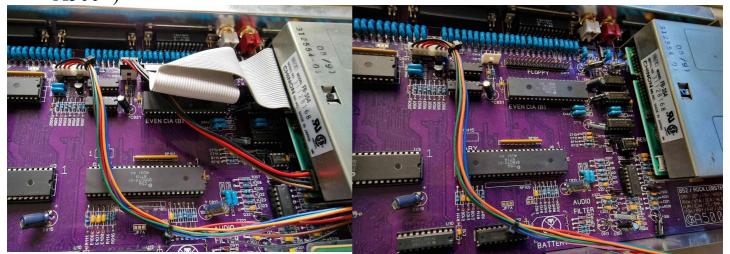


# Appendix\* A500/A500+ FITTING MANUAL:

1.Turn your A500 upside down and remove 6 screws:



2. Remove top cover, and move keyboard away if needed, for better access(picture below represents nice purple A500++, which is a replica of A500+)



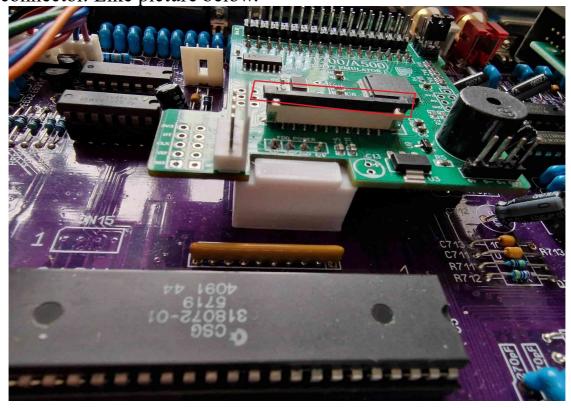
3. Unplug FDD 34 pin data and 4 pin power cable.

4. Time to place **GoDRIvE1200** on the 34 pin data socket, but before make sure that A500 support bracket is fitted in place. (it usualy is)



5. As GoDRIvE1200 sits directly on the FDD 34pin data socket: TAKE YOUR TIME, AND MAKE SURE IT'S ALIGNED CORRECTLY, AS ANY MISALIGNMENT MIGHT CAUSE DAMAGE TO THE EMULATOR/ MOTHERBOARD!!!

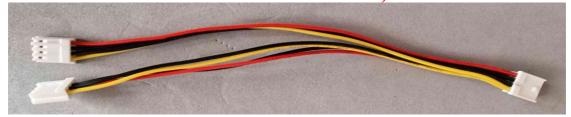
6.Once fitted correcly, time to fit FFC tape first. Lift the tab on the FFC connector. Like picture below.



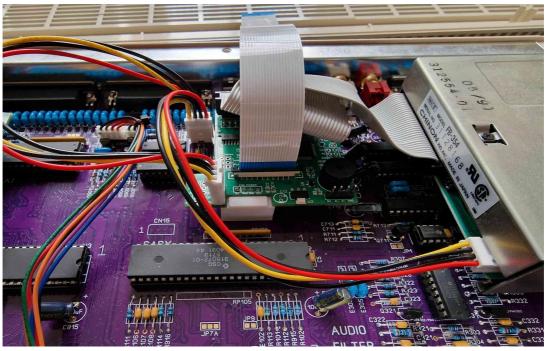
7. Place FFC cable firmly into the FFC connector, BLUE side as shown in the picture below, then lock the FFC connector tab back in.



8.Reconnect 34 pin data cable to the floppy drive and then to the GoDRIvE1200 board (NOTE PIN 1 ON THE GoDRIvE1200 IS ON THE RIGHT HAND SIDE CLOSE TO THE FDD). Make sure it sits firmly.



9. Now you need to use Y-split power cable. 10. Connect Y-split power cable to motherboard then to the emulator and FDD.



11. Feed the FFC cable through the top case vents.



To finish fitting of the breakout box refer to the points from - 18 onwards of A1200 fitting manual.



INFO@DIGITALRETROBAY.CO.UK 2022 ©