

Preparing an SD for use with your ST & PC

1. Introduction

This quick guide is to show those SatanDisk owners (and UltraSatan – when it's released) how to use their SD cards with the device so that they can transfer files happily between the ST and their PC.

I've used this method with quite a few SD cards & Micro SD cards (up to 512MB in size) and never had any problems with certain brands (Kingston & Nokia). The cards work just as well in the ST as they do in the PC – making file transfers a breeze!

Caveat:

However, not all brands of SD card are compatible with the SatanDisk. If, at the end of this tutorial, you still can't see the SD card then it's more than likely down to SatanDisk not liking your brand of SD card. This has been fixed in the UltraSatan by all accounts – or, at least, the compatibility has been tested further with more brands of SD card.

As an example, I've got a 32MB SD card which, although it goes through most of the process below, it still can't be seen by the SatanDisk after the reboot. Likewise with a 118MB SD card that was once used inside a TomTom unit – it goes through the motions but still won't show up after the reboot.

2. Requirements

- a) an ST/STE/Mega STE – so long as it's got an ASCII port and TOS v1.04 or higher
- b) a SatanDisk
- c) HDDriver - I'll be using HDDriver 8.23 (latest version when this guide was created) *
- d) An SD, Mini-SD or Micro-SD card (with relevant adapter for your PC) – I've used both 256MB & 512MB Micro SD cards with ease.

* I've not tried this method using any other HD driver software (commercial or freeware) so I can't comment on AHDI, ICD Tools or add-ons such as BigDOS. They are for other people to create a guide similar to this one.

3. Preparation (PC)

Each SD card is formatted on the PC first using a standard FAT. I've tried FAT32 and, whilst it's not worked 100% of the time, FAT formatting has! So for the sake of this guide, I'm recommending that you try FAT type formatting first of all.

The FAT format sets a maximum of 4Gig allowable but since when have you ever had more than 4Gigs worth of Atari ST stuff that you wanted to keep on the one SD card?

Don't be greedy and treat yourself to some smaller SD cards. The 256 & 512Mb cards are extremely cheap – especially from any shop that deals with 2nd hand mobile phones. I paid 50p for the 256MB cards and a whole £1 for a 512MB card from the CEX in Manchester, UK. That's more than enough space and means you can set up one card for games, one for apps / development etc. – or, in my case, lots of different SD cards for disk imaging!

Once formatted, you can remove it from your PC for now and place it in your SatanDisk.

4. Preparation (ST)

1. Put the SD card into your SatanDisk, reboot your ST with the HDDriver disk in and, when you're at the desktop, load HDDRIVER.APP.
2. Click on the Tools menu and then Device Check, something similar to this screen should now show up.

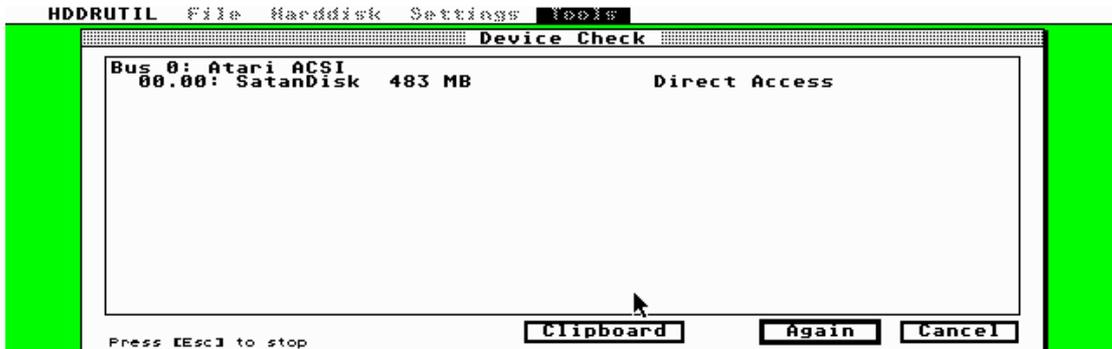


Fig 1: Proof that HDDriver can see your SD card

3. Click on Cancel and we're now going to fix that Windows created partition so that your ST and your Windows PC can see the same files. Click on the **Harddisk** menu, then click on the **Partition** menu option.



Fig 2: Start the conversion process off

4. HDDriver will show you the partition information – click on OK.

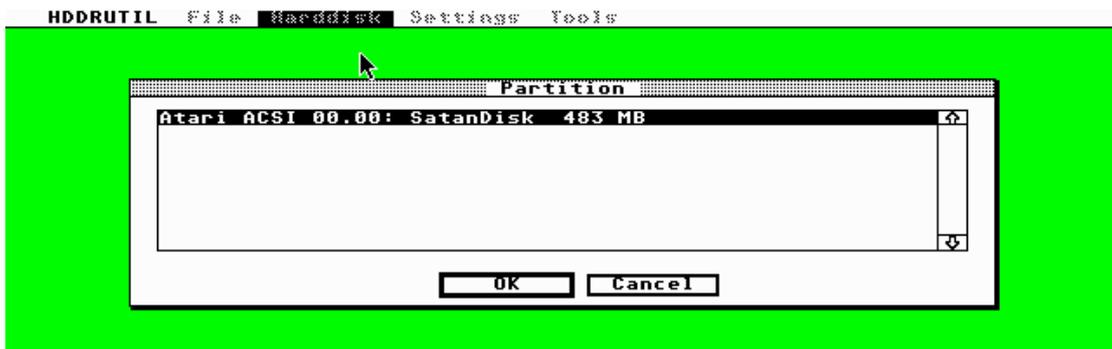


Fig 3: Proof that HDDriver can see your SD card

5. Lots of information about the current partition are displayed – note the 'Windows' value in the Platform field. This is what we're going to change.

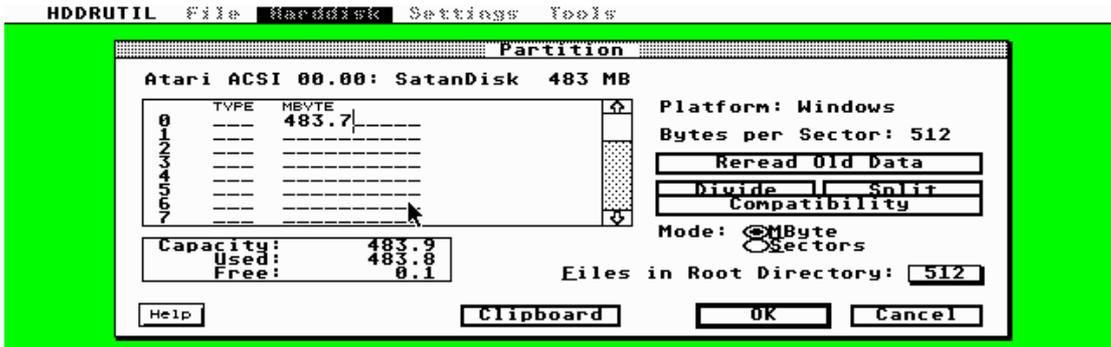


Fig 4: Back in the old days, this h/drive size was totally unimaginable for an ST!

6. Click on the Compatibility button.

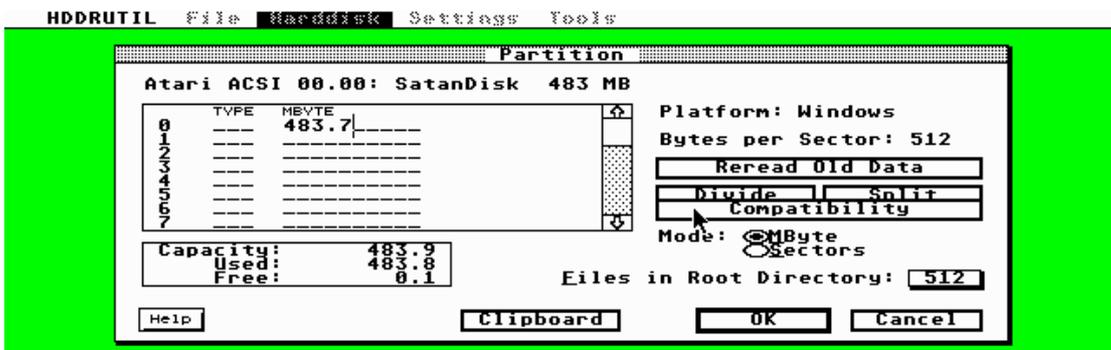


Fig 5: Just in case you can't find the Compatibility button, I've pointed it out to you ☺

7. On this dialog, click the 'TOS & Windows Combined' checkbox and then click on OK. There's no need to change any other value on this dialog box.



Fig 6: This is the hardest part of the process .. honest!

8. A brief warning will come up telling you that this kind of partitioning is only available for TOS v1.04 or MagiC or MiNT. Click on **Continue**.



Fig 7: Standard warning that you're going to lose the contents if you continue ...

9. Another warning dialog will appear. Click on **Continue**.

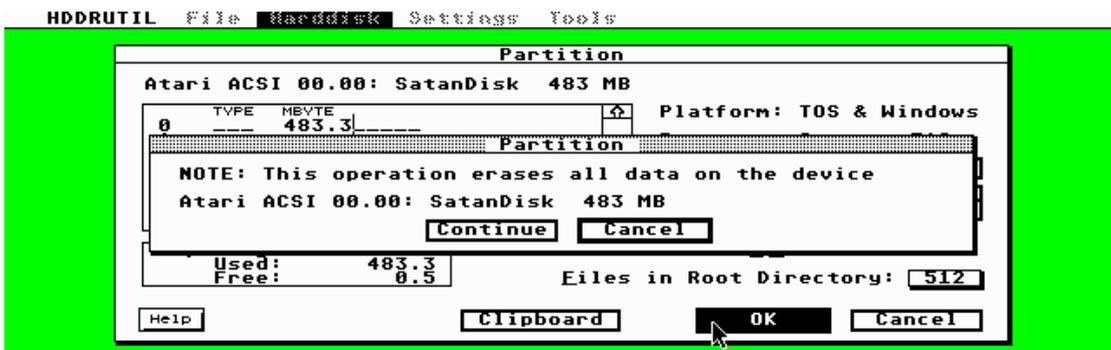


Fig 8: Another warning ..

10. Honest .. this is the last warning dialog. Click on **Yes**.

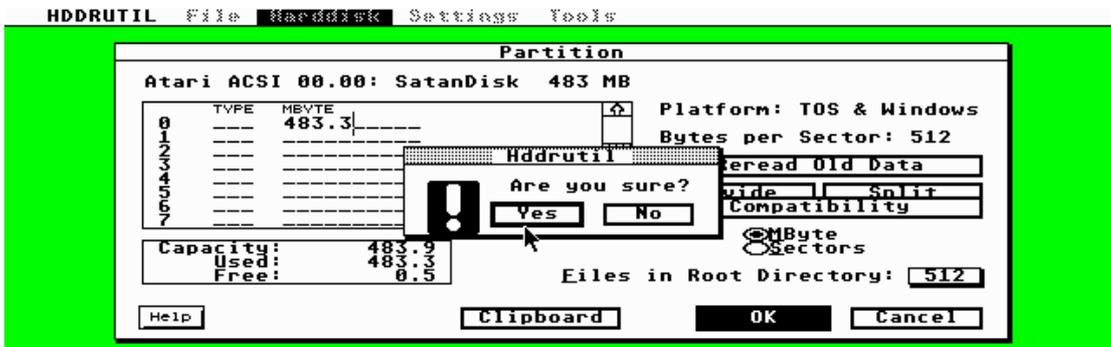


Fig 9: Final warning – clicking Yes means there's no return!

11. Once the process has finished, you'll be presented with this quite worrying error message. But don't panic. Click on Cancel and you'll be returned to the HDDriver's main window.



Fig 10: Proof that HDDriver can see your SD card

12. Now let's try installing the driver onto your newly prepared card. Click on **File**, then the **Install HDDriver** menu option but the dialog box that appears seems to suggest that your card is no more. But, as before, don't panic!

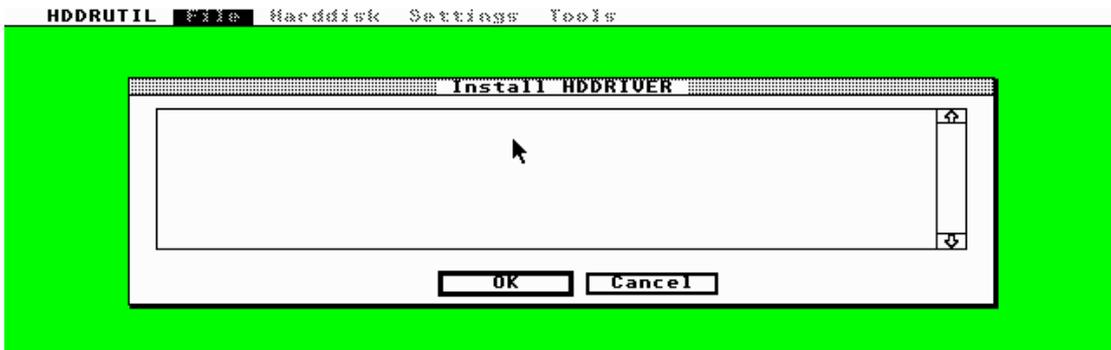


Fig 11: Oops .. where's my SD card gone?

13. Reboot your ST and launch HDDriver again from the floppy disk. Again, click on the **File** menu, then the **Install HDDriver** menu option but this time the display has changed. Click on OK to install the driver onto your SD card.

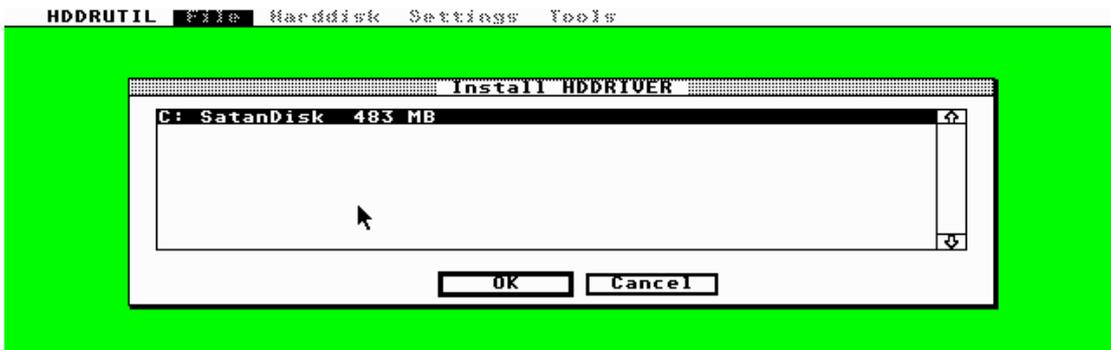


Fig 12: Phew! It's back!

14. Once this is done, you'll get a confirmation dialog.



Fig 13: Now I can play with my SD card!

15. Close the HDDriver application, take out the floppy disk and reset. You *should* get your GEM Desktop up with the normal two Floppy Disk icons but with a new Hard Disk icon. Double-click on C: and make sure the HDDRIVER.SYS file is present.

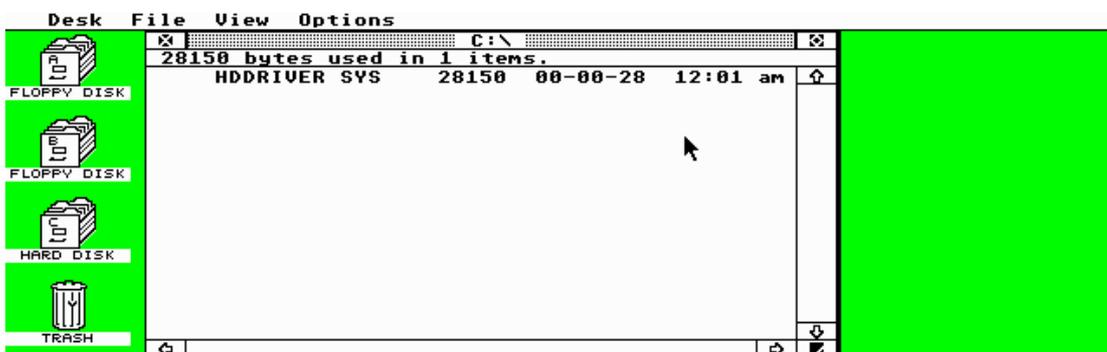


Fig 14: Proof that HDDriver can see your SD card

16. Save the desktop as you'd like it and that's it done. Now to pop it back into your PC and transfer all those HD compatible games, install some applications or use the SD card for making MSA & PASTI images of stuff.

5. Final Note

One thing to remember with SatanDisk is that if you change SD cards, you need to power it off and on again. This bug has been confirmed as fixed in the UltraSatan when it's released (plus you can have twin SD cards installed).

Steps 11 & 12 where HDDriver cannot 'see' the SD card might not happen on everyone's machine but it does with my SatanDisk. Mine could be due to it being a beta version of the SatanDisk.

Whatever you do with your SD card(s) in SatanDisk - enjoy!

If you've got a different set-up process using a different suite of HD tools, then get writing!

Other tools used

I used SNAPIT (by Don Simpson) on my ST (in Drive B:) so that every time I pressed ALT & HELP, the current screen was saved as a Degas PI2 file. These were then converted to BMP using Tom Kirk's Atari Picture Viewer v4.1 and then into PNG file using IrfanView.