

## Rear Admiral Review ©2010 MyTec Electronics

Got my Rear Admiral HyperDrive System in the mail today and thought I would write up a review as I setup and explored the ins and outs of this mass storage solution for the Commodore 64 and 128. Since this is my first ever experience with this hardware, and never had the privilege of owning the original Lt. Kernal system by Xetec, you are getting the full on newbie perspective.

According to Jeff Jarian of MyTec Electronics (Creator & Designer), the Rear Admiral is a 100% Lt. Kernal compatible hard drive system. The system consists of two parts, the Rear Admiral HyperDrive host adapter and an external SCSI hard drive. The hard drive is attached to the host adapter via a 25 pin cable. Hooking up the host adapter requires opening your system. If you have a C=64 then all that's needed to do inside the computer is to hook a clip to pin 6 of the chip in u27 and another clip to resistor R44. One thing I want to note is that in the manual the diagram shows R44 in the wrong place, at least according to my motherboard (See picture). R44 was actually the last resistor in the row of three, so it went R43, R45, R44. I was hesitant to connect to R44 because it didn't match the diagram but I did and everything seems to be working fine. Anyway, these two attachments are connected to the host adapter on the other end with what looks like a two pin jumper that the wire is soldered to (remember the old days when you had to use jumpers on the motherboard of a PC to set the buss speed and so forth?). Another item I want to mention is that there were two additional jumpers needed that didn't come with the unit. Originally I hooked everything up and turned it on and nothing happened. After going back to the manual I noticed that there needs to be jumpers on rows 3 and 5 (going from the left). Found some jumpers in a spare screws box and that did the trick. I won't go into any further detail as I am not qualified and the directions are in the original LT. Kernal manual which is available online at <http://www.bombjack.org/commodore> in the hardware area. If you have a C=128 or C=128D you will need to purchase and install an additional MMU adapter. One thing odd about the adapter is that the ribbon cable for the c128 and c128d is two different prices. One is 49.99 (c128) and the other is 59.99(c128d) but they are the same cable, one is just a few inches longer than the other. I really think that is silly. I won't go into detail about installing this adapter as I haven't done it yet and am not qualified and the directions are in the original LT. Kernal manual which is available online at the aforementioned website.

Unfortunately the mentioned connectors were too short and I had to add some additional wire to make it from the connection points on the C=64 motherboard back to the host adapter, not a big deal but seems like adding a little additional cable would have been appropriate no matter which system you were hooking to. It might be possible that the wire on the connections is long enough for a C=128(D) setup but I haven't checked.

Ok, everything is hooked up and back together. The moment of truth and... It works! There is a slightly longer delay when you turn on the C=64 until you get your blinking prompt but this is due to several things going on in the background between the system, adapter and hard drive which are detailed quite

well in the LT. Kernal manual. Did I mention that the system didn't come with a manual? It did come with a couple pages outlining the hook-up of the adapter to the computer but that's it. I can't say I'm disappointed because I was told this before ordering. Jeff was kind enough to call me and give me quite a nice rundown of the system when I emailed him that I was interested in purchasing one. There should be a complete website online soon which will have the complete manual with additional addendums to the original.

I would like to mention that I personally feel the unit requires an additional fan in the front of the enclosure. The enclosure has a spot for what looks like a 40mm fan but connecting to the power supply might be tricky. There is a fan on the left rear when looking at the front which is I think a 40mm fan but it doesn't seem to pull enough air to cool both the drive and power supply.

Here are some of the questions and answers to the original email I sent Jeff before he called me:

1. Will the unit be fully compatible with software that was previously written to work with the Ltk?

**Yes - 100% - Plus much more stable DOS and completely redesigned (sexy looking, too) Host Adaptor / Hardware.**

**Also Available - Rear Admiral AutoMUX Multiplexer (new product).**

2. What is the standard size drive offered with the unit and will it be user replaceable with a bigger drive down the road?

**~200 MB drive, Yield: 160.9MB - DOS 7.4 (sometime next year) will support larger sizes. Early buyers are registered for Free DOS Upgrade to 7.4 once released.**

3. If it is replaceable, what type of Drive is used and if it's scsi, what interface? (ie 50pin, 68 pin HD, etc.)

**Yes - 50 Pin.**

4. Will there be a manual accompanied with the drive that will supply programming information for those of us interested in writing utilities?

**Yes - LTK Manual (for now) with RA Addendum Doc.**

5. Will the unit work with a 128DCR?

**Yes - w/MMU Adaptor (available).**

6. Is JiffyDOS supported?

**NO - Never - Spaghetti Code - CMD "Yuck!" - We only use JD for system DOS install, then the switch stays OFF. :)**

7. Can more than one drive be put on a single system?

**Yes.**

8. Do you have any pictures available?

**Yes - Sent one with the email.**

9. How much is the unit and adapter and do you have any available?

**Complete System: \$499.95, MMU Kit for Flat 128: \$49.95, for 128D: \$59.95 (longer ribbon cable, etc.)**

10. If you do have some available, what form of payment do you accept?

**Yes - Some available for immediate shipment while they last, then we have to build more. PayPal.**

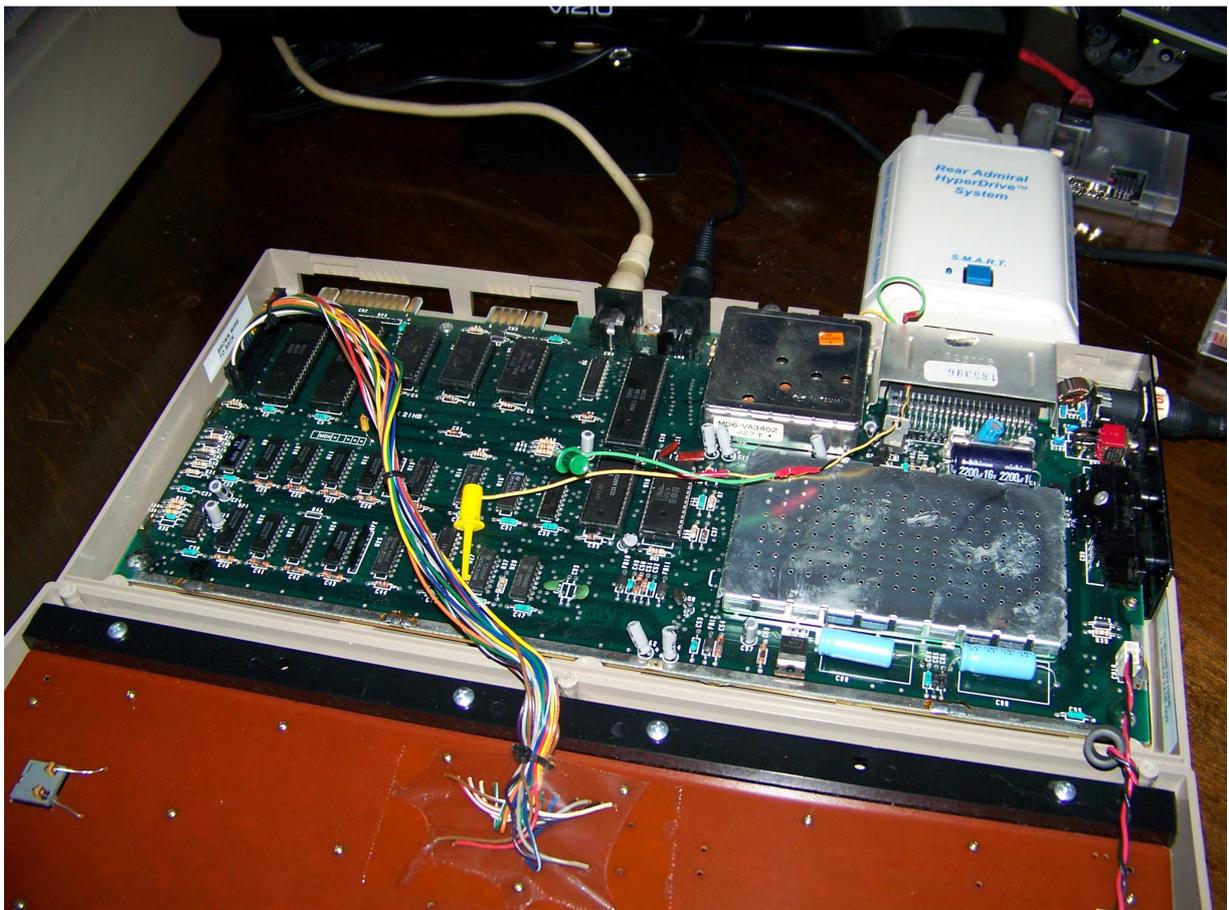
11. Is there a website?

**Yes - Not Open Yet - Cool Site, but Work in Progress.**

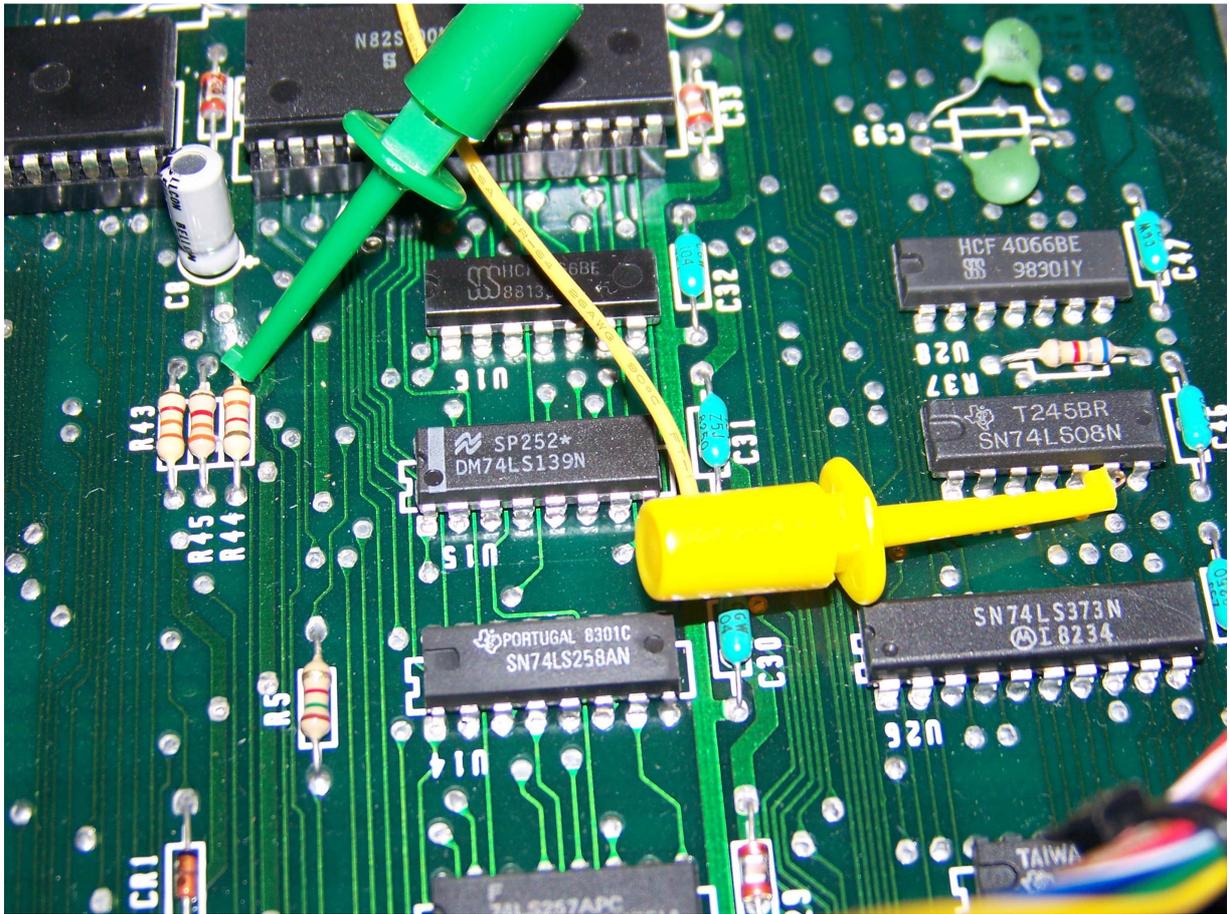
I haven't had a chance to actually USE the system yet aside from doing DIR and loading a couple of the programs that are pre-loaded on LU10 (where DOS is installed) so I will save a review of the performance for another day.

Ok, here are some pictures:

This is obviously a picture after I hooked it up.



This is a close up of the two connections you need to make on the C=64 :



This picture is where you connect the wires onto the host adapter from the motherboard :



This is a picture of the initial boot-up screen after powering on (Sorry about the nasty glare):



That's the hard drive on the left on top of the 1541.

This is the hard drive:



Back of the hard drive:



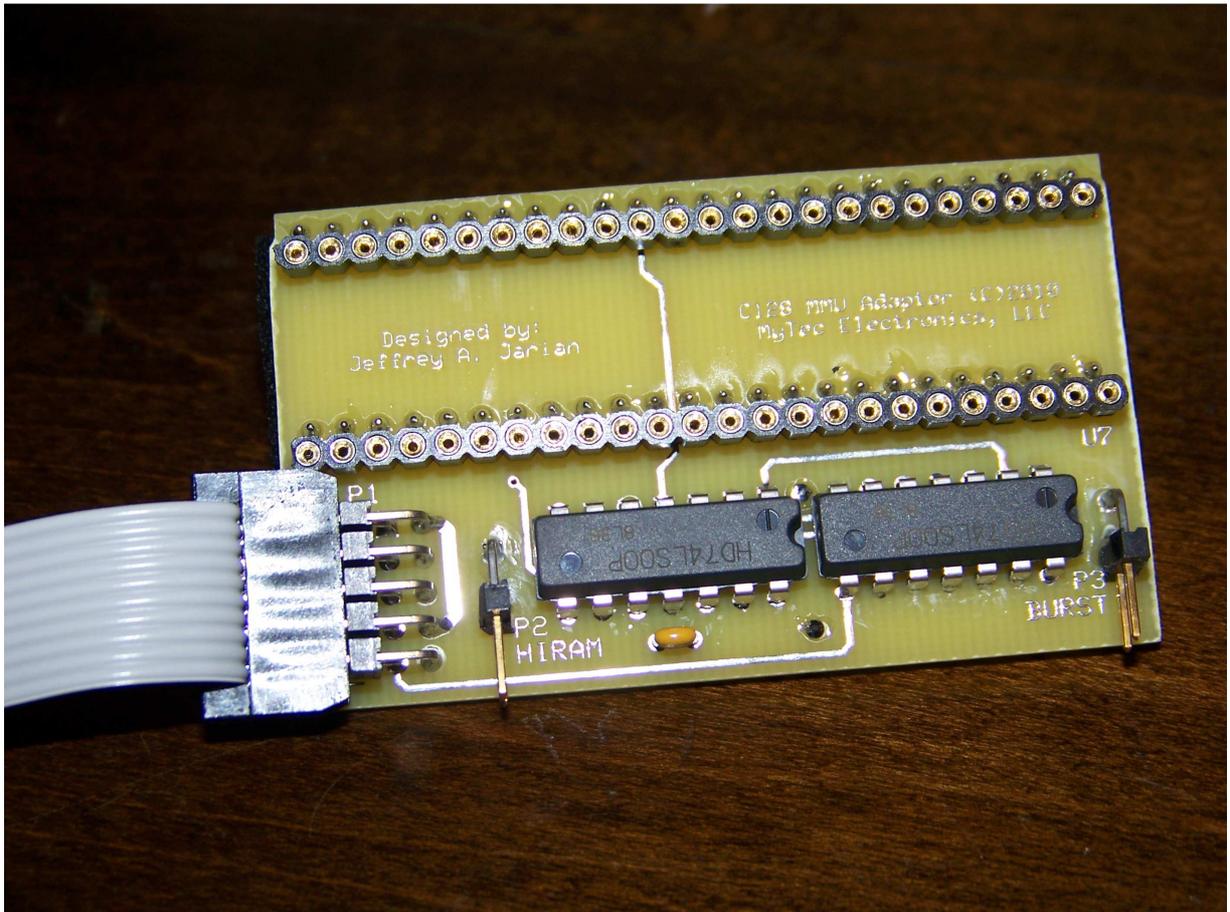
Inside the hard drive housing:



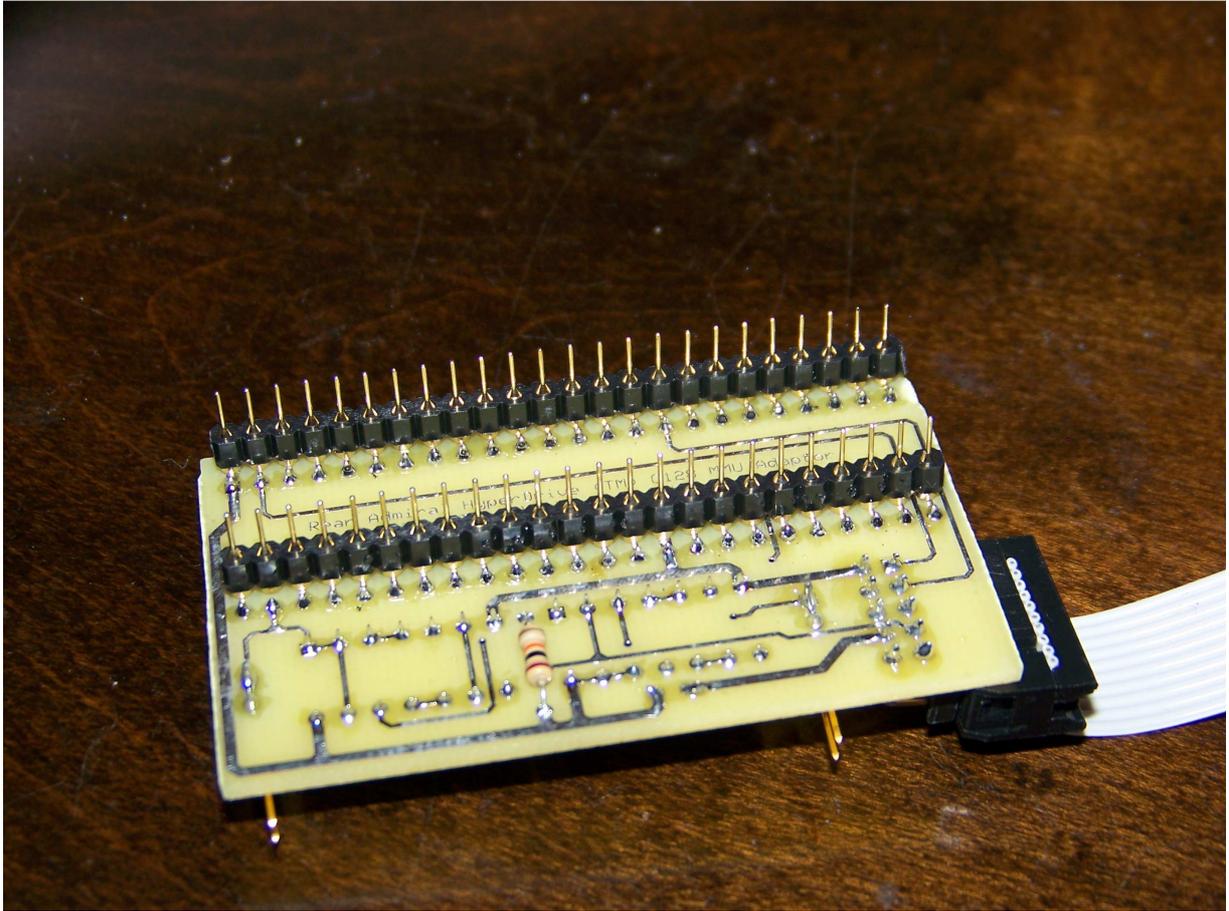
Hard drive itself (Yup, double height 3 1/2"):



This is the C=128 MMU Adapter (top):



This is the C=128 MMU Adapter (bottom):



This is the C=128 MMU Adapter (overall with cable):



Here's a better picture of the boot-up screen without the nasty glare:



