



Sprinkler controller replacement using RaysHobby OpenSprinkler Pi and RaspberryPi.

Sunday, August 04, 2013

This is offending beast I had planned to take out.

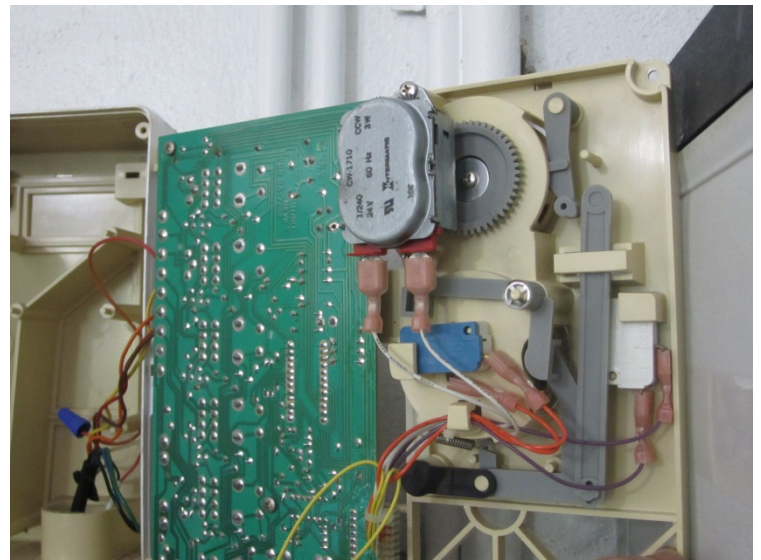
This control unit is in our garage so we've spent quite a lot of time there, tending to the sprinkler system moving it zone to zone.

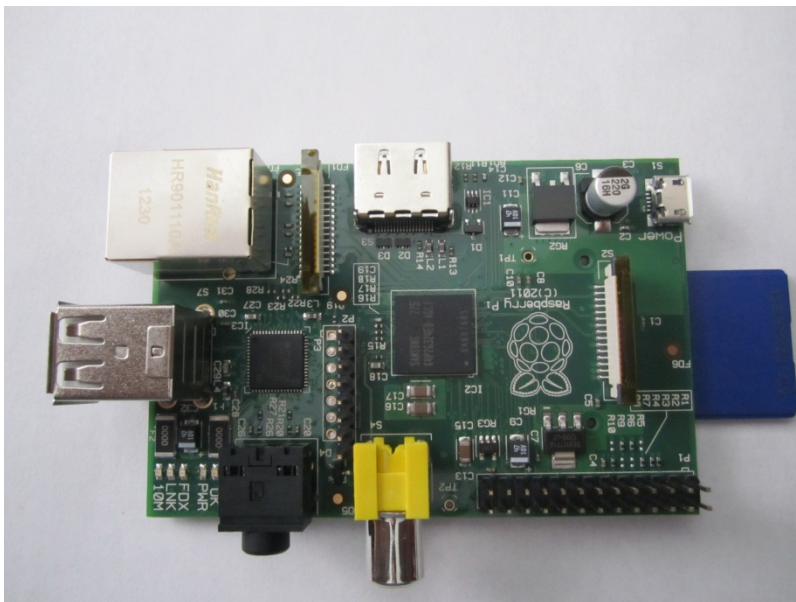
We have 4 zones to water.

The whirly-gigs had stopped running. Obviously any cogs and reed switches needing to be replaced would be a few dollars.

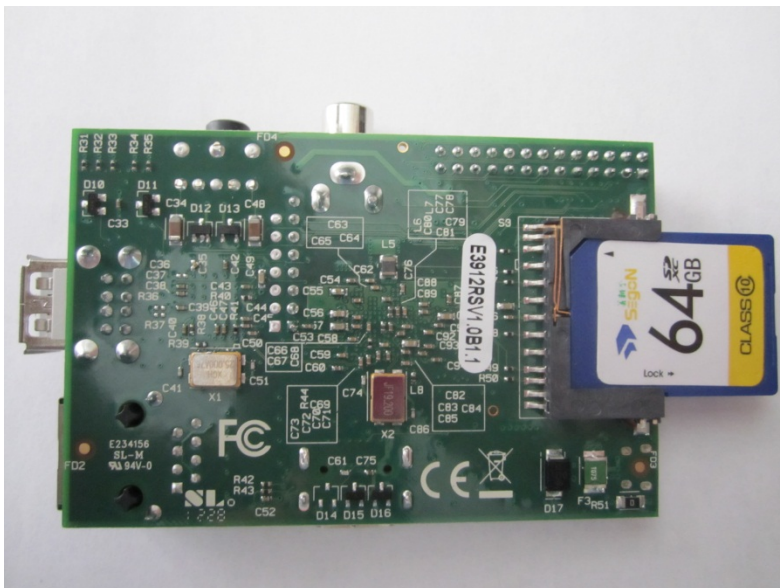


What luck! The power adapter on the Toro is 24V, exactly what we need for the Pi setup.





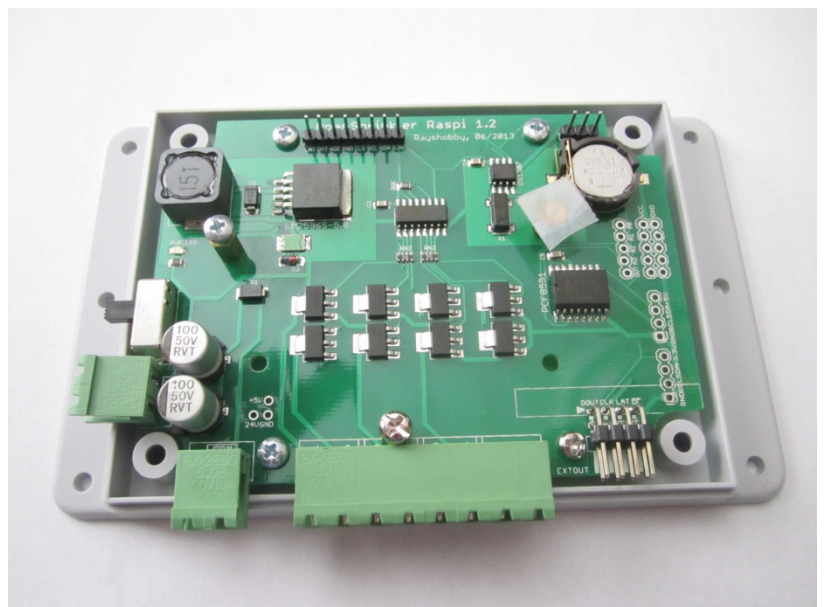
This is my Pi. It's been sitting in my desk drawer waiting many months for a higher purpose...

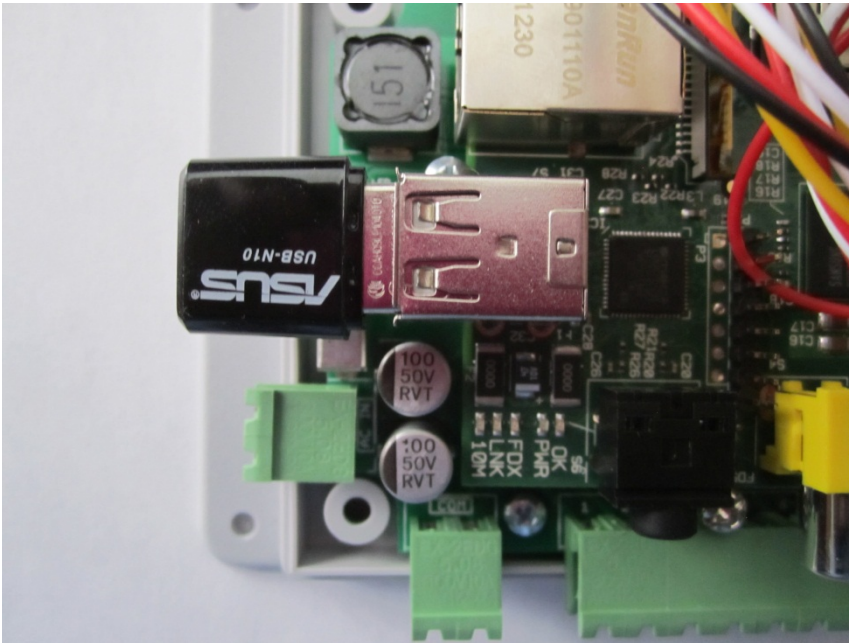


Yes I lucked out when I came across a 64G SAN disk for about \$20. It works great. Can't believe it.

I had some trouble figuring out how to mount the RaspberryPi. The two edge pinch screws are ok but I didn't want to apply a drill to the RaspberryPi to enlarge that existing hole. It doesn't match the post position either.

In the end I stuck some tape on the post to make there is no unwanted contact.

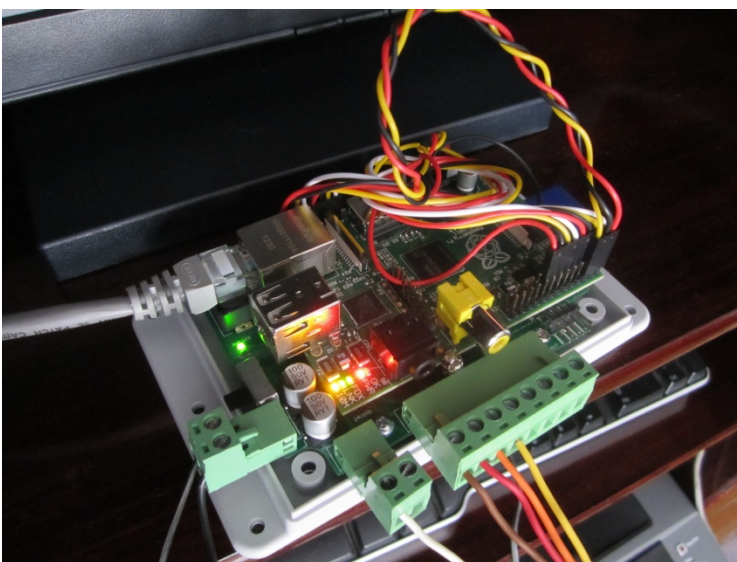
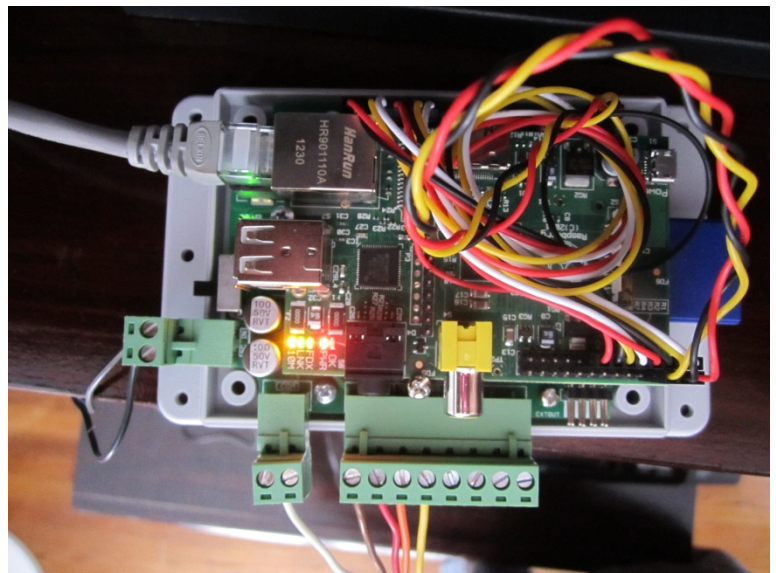




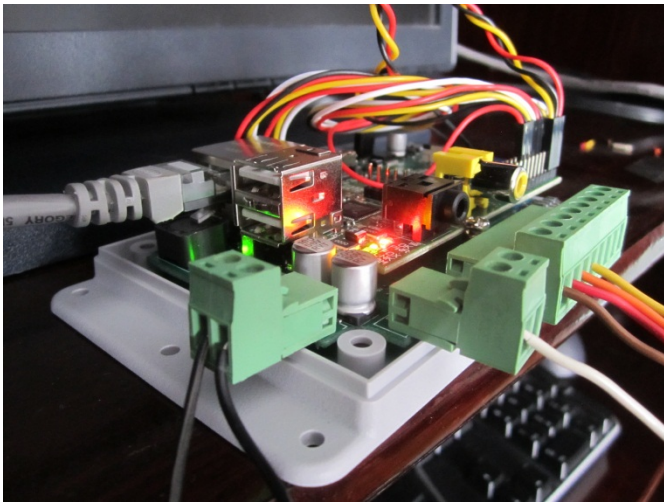
A problem I ran into. The ASUS N10 sticks out a mile and I can't get the OpenSprinkler Pi clear cover back on.

I abandoned the WiFi option which seems to be less reliable for connectivity.

Even using an RJ45 cable for network connection, the neck to the RJ45 is in the way. Have to leave the cover off for now but I think I can get a mini RJ14 flat ribbon style cable.



I tested the Opensprinkler Pi zener at 4.96V with the Toro power adapter. Didn't see any notes about polarity but I was hesitant about blowing something up on the first switch on.



Looks a bit messy but I'll figure a way to modify the clear cover some time and cement this thing to a wall. ☺



Went in a circles for a couple of hours with keyboard/mouse conflicts on the Pi, WiFi, No Wifi, Direct network connect etc.

I was also using PutTY from my laptop and didn't realize quitting the session closes out the command line session on the Pi also when ends the web server program.

In the end, the best way to access the Pi was to plug power and an RJ45 internet connection then use MSTSC remote software on Windows 7 to connect to the Pi. Quitting MSTSC doesn't close out anything on the Pi. Once I got that running, I could type in all the commands reliably.

This is <http://piwater01/sprinklers> on my iPad.



My wife loves this thing. I showed her how to long in and she ran Zone1 right from where she was sitting.

Thank you Ray!

Goodbye Toro!

Garbage pickup on Monday.