

## DPRG RBNV Chat Record – Oct 3, 2023

Carl Ott

7:36 PM

Doug D Scott G Doug P Pat C - Tom C – questions about 8266

Carl Ott

7:39 PM

~7:36pm - Doug D / tale of woe. Everything set up & working great. Carried outside didn't work. Back inside, got it working - took back outside - then after too long discovered some screws were binding on the wheels - and probably blew out motor drivers... This prompted discussion of matching load to drivers...

Carl Ott

7:43 PM

also discussed factors such as stall current, max PWM driver frequency and whether or not the module includes flyback diodes. One recommendation was to bite the bullet and buy stronger modules e.g. from Pololu.

Mickey Dean

7:45 PM

Doug, D. you are not the ONLY one. I had an ESC spit smoke at me in anger from a short test. and these ESCs can handle 80A continuous. I am kind a still mad about i because I had a fuse on it.

Doug D

7:45 PM

Rub and Buff to make things look like metal.

Carl Ott

7:45 PM

Doug D. is going to try some of this - rub and buff <https://www.amazon.com/AMACO-Metallic-Finish-Antique-0-5-Fluid/dp/B00081HYDM>

Carl Ott

7:46 PM

~7:46pm - Scott G gave an update for his two outdoor robots. Working hard to get them ready since 18 Nov is coming up quickly...

Jim F - CalgaryAB

7:47 PM

Hello from Calgary Alberta Canada

Carl Ott

7:48 PM

Scott shared video - first - a test run with BELCH.

Carl Ott

7:50 PM

Also showed video of TURD running - new IMU and whole new sensor array.

Bottom Line - Not one but TWO GOLD STARS for Scott! (even though the video needed to be edited in spots)

Jim F - CalgaryAB

7:58 PM

@Ray looks like a physical Polarized filter.

Carl Ott

7:59 PM

I got to step away for a bit -next in queue after this:

Pat C - Tom C – questions about 8266 Open mic

Jim F - CalgaryAB

7:59 PM

Good catch @Scott. Thanks.

Doug Paradis

8:08 PM

RoboColumbus link: <https://www.dprg.org/robocolumbus-2023/>

Diode Laser cutter cutting metal: <https://www.youtube.com/watch?v=ISN5Yz1Xq1Q>

Tom C

8:10 PM

1 ounce copper is 1.4 mils.

Doug Paradis

8:13 PM

Rehabilitation glove: <https://www.amazon.com/dp/B0C9TMDQ7D>

Tom C

8:40 PM

I2C pullup notes: <http://www.gammon.com.au/i2c>

Tom C

8:42 PM

Search for "Pull-up resistors" in the [Gammon.com.au](http://www.gammon.com.au) reference...

Doug Paradis

9:01 PM

Random Nerd ESP32 on Arduino course at 25% discount (only tonight): <https://randomnerdtutorials.com/learn-esp32-with-arduino-ide/>

Ponder SomeMore

9:20 PM

i got to bolt y'all. 'nite.

Carl Ott

9:43 PM

<https://southstreetseaportmuseum.org/the-ships-compass-and-its-binnacle/#:~:text=The%20compass%20on%20ships%20is,delicate%20compass%20from%20the%20elements>.

Tom C

9:51 PM

When i was learning about magnetometer based compass, I found this very useful:

"<https://www.appelsiini.net/2018/calibrate-magnetometer/>"

Tom C

9:52 PM

Also this

one...[https://aerospace.honeywell.com/content/dam/aerobt/en/documents/learn/products/sensors/application-notes/AN203\\_Compass\\_Heading\\_Using\\_Magnetometers.pdf](https://aerospace.honeywell.com/content/dam/aerobt/en/documents/learn/products/sensors/application-notes/AN203_Compass_Heading_Using_Magnetometers.pdf)