DPRG RBNV Chat Record - November 7, 2023

Carl Ott

7:40 PM

~7:37pm - Ted M gave an update - finally made it online just in time to score a Sparkfun Dumpster Dive Box - filled with wonderful goodness.

Carl Ott

7:43 PM

~7:42pm - Ray shared progress with his 2 robot platforms, a 2-wheel drive and a 4-wheel drive.

Carl Ott

8:07 PM

~8:05pm - Doug P gave a progress update - his rover is looking good - will be down to the wire for the 18 Nov contest. Also showed a demo.

ed mart

8:13 PM

Silver star, great job, Doug

Carl Ott

8:30 PM

~8:27pm - Tom H - Reviewed a battery evaluation he did - found one totally dead Roomba pack and 3 quite useable ones. Also showed a LiFe pack (receiver for RC plane). Also showed a sensor pack he's built for one of his robots.

Also gave interesting scenario for a digital compass (trying to use both underwater and above water)

Pat C

8:35 PM

How much tilt does a robot have before it's tipped over?

Carl Ott

8:38 PM

~8:37pm - Doug D showed nice progress on a RoboDog leg - now looking very steam punkish.

Carl Ott

8:42 PM

Pat - about "How much tilt does a robot have before it's tipped over?" -> isn't that very dependent on each particular robot platform - center of mass with respect to Wheel spacing & geometry and whether or not somebody pushes on the sensor mast?

Carl Ott

8:43 PM

~8:42pm - Doug D also showed progress with his RiPi powered "all sky" camera - so that it can remotely monitor a dark sky location for astronomy and verify whether have clear skies or not.

Carl Ott

8:51 PM

 \sim 8:49pm - Pat described a rule of thumb in electrical world for sizing fuses. Often 1.5 x the largest load plus the sum of the rest. Then there are separate rules for startup currents.

Mickey Dean

8:53 PM

Doug D. I thought of you when I saw this https://www.yahoo.com/lifestyle/rare-lunar-analemma-photographed-over-150450925.html

Carl Ott

8:57 PM

~8:54pm - Doug shared a motor driver.

Looks like you can buy a 4 pack for \$22... https://www.amazon.com/BTS7960-H-bridge-Double-Current-Diagnostic/dp/809W8VV6RH

Pat C

8:59 PM

This is the one I was thinking of that you can only drive to 250 pwm https://www.amazon.com/Controller-Dual-Channel-Bridge-Driver-

 $\underline{Module/dp/B07D2948RZ/ref=sr_1_9?crid=2SQYVEW7XVJLL\&keywords=h+bridge\&qid=1699412251\&sprefix=1699412251\&sprefix=1699412251\&sprefix=1699412251\&sprefix=1699412251\&sprefix=1699412251\&sprefix=1699412251\&sprefix=1699412251\&sprefix=1699412251\&sprefix=169941$

Carl Ott

9:02 PM

Pat that's interesting - I wonder if the driver Doug showed also requires care to stay below 255 pwm...

Pat C

9:03 PM

I think the IBT-2 will go to 255 pwm as Doug P says.

Tom C - Hamilton, ON

9:04 PM

Interesting test, including pushing current as high as

possible: https://www.youtube.com/watch?app=desktop&v=PUL5DZ9TA2o

Carl Ott 9:08 PM

~9:07pm - Harold described some fun stuff on the robot front - progress adding a claw to his Mecanum wheel robot...

Carl Ott

9:11 PM

Harold showed a readymade claw one of his Twitch subscribers referred him to - perfectly sized to grab a soda can. Also showed an optical flow sensor very neatly managed underneath the center of his Mecanum wheel robot. And intends to also add a nice OLED display...

Carl Ott

9:13 PM

The Claw Harold showed looks like this one https://www.amazon.com/Mechanical-Robot-Gripper-Black-

Without/dp/B088NYMC1B

Carl Ott

9:16 PM

Here's a similar claw but a little bit larger https://www.amazon.com/Mechanical-Robot-Gripper-Without-servo/dp/808YDH27YK

Carl Ott

9:22 PM

Here's a link to the actual one Harold purchased and showed https://www.amazon.com/Premium-Mechanical-Gripper-Manipulator-Experiment/dp/B0BCYQQ4NG

Carl Ott

9:28 PM

~9:27pm - Harold showed his 100mmx100mmx100mm sensor test cubes.

ed mart

9:46 PM

Tri clor

Tri clorlene

ed mart

9:47 PM

Smoke wrench

Pat C

9:54 PM

See you next week.

Carl Ott

9:55 PM

Ed and Ray - FYI - I believe this is what my guy used to clean engine

 $parts...\ \underline{https://www.berrymanproducts.com/products/cleaning-degreasing/berryman-non-chlorinated-chem-dip-professional-parts-cleaner/$