

DPRG RBNV Chat Record – March 14, 2023

Carl Ott
7:42 PM
~7:40pm - Ray showed a video of his air cannon prototype for can-can competition
John G - I muted you...
ed mart
7:51 PM
Hilti or passload
Carl Ott
8:00 PM
Thanks Scott - recommending "CDC Surplus Products" on Beltline in Richardson - which advertises itself as "<https://www.facebook.com/people/CDC-Surplus-Products/100063588635979/>" - and which you described as "Tanners for machinists"
Carl Ott
8:01 PM
Black Star for Ray's show-and-tell
Carl Ott
8:06 PM
~8:05pm - Doug - tangential update on battery chargers & cables...
Carl Ott
8:13 PM
Doug showed a constant current load.
Carl Ott
8:18 PM
something like this in constant current mode <https://www.amazon.com/gp/product/B07VNDGFT6>
John Gauthier
8:19 PM
https://www.amazon.com/gp/product/B0978T3JKH/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
Carl Ott
8:32 PM
~8:30pm - Carl showed progress on his 11-year-old cousin's robot - starting from scratch. Plan to use these parts - kit of driver and controller parts <https://www.aliexpress.us/item/2255800237611775.html>.
Carl Ott
8:33 PM
motors <https://www.aliexpress.us/item/2255799963134743.html?>
motor brackets <https://www.aliexpress.us/item/2255800247699075.html>
Carl Ott
8:35 PM
Store link - https://www.aliexpress.com/store/1101352957?spm=a2q0o_detail.1000007.1.1f004c83HrfrKj
Jim F - CalgaryAB
8:37 PM
Hello Robotcs Experts! ;-)
Jim F - CalgaryAB
8:39 PM
Robotics Hobbyists & Experts ;-)
Jim F - CalgaryAB
8:44 PM
Hello @Carl & Robotics Hobbyists & Experts ;-)
Harold Pulcher
8:44 PM
Hi Jim!
Carl Ott
8:44 PM
~8:44pm - Mike W - question about i2c and servo control and how to use a single library to add a second device on the i2c bus.
Jim F - CalgaryAB
8:48 PM
HandUp: Does a shielded cable for I2C help?
Carl Ott
8:51 PM

Led to a good discussion of practical matters in using i2c in robots - with foot long cables - versus the original design intent of chip-to-chip communication w/in a circuit card

Jim F - CalgaryAB

8:57 PM

<https://learn.adafruit.com/adafruit-Itc4311-i2c-extender-active-terminator/overview>

Doug P.

9:02 PM

Jim, Yes, I believe that is the unit I used.

Jim F - CalgaryAB

9:04 PM

@Carl Thank You! Interesting Indeed! ;-)

@Doug Paradis Thank you!

Carl Ott

9:05 PM

@Jim - thanks for the prompt - if ever there was a group that was ready to pontificate...

Jim F - CalgaryAB

9:06 PM

I would like to see JimBOT vs Harold's Xmo / ZeeMo (ExoMy) with the 4 Square Competition. @Harold Pulcher

Carl Ott

9:07 PM

~9:07pm - Ray showed code samples for GPS using an I2C connection.

Carl Ott

9:11 PM

~9:11pm - Mike W shared the I2C snippets of code that he's using.

Jim F - CalgaryAB

9:20 PM

HandRaised: How many servos does Mike want to drive?

Carl Ott

9:25 PM

~9:22pm - Paul - showed some spare parts that came with his watering project - a flow limiter for his relative's farm in New Zealand

Carl Ott

9:29 PM

~9:28pm - Paul raised a question for the assembled Illuminati - a Starlnik for the RV (suitable for national forest w/ no tree coverage) - means a battery for Starlnik - e.g., 600 WHr battery. And then, some way to charge the 600 WHr battery...

hopefully charge in 3 hours - e.g., need a 200 W charger...

Jim F - CalgaryAB

9:38 PM

@Carl Off-Grid projects are interesting.

Comment: @Carl Off-Grid projects are interesting.

Carl Ott

9:39 PM

Jim - agreed!

Mike Williamson

9:44 PM

https://www.amazon.com/Lead-Acid-Portable-Maintainer-Desulfator-Motorcycle/dp/B09ZLD6RJ5/ref=sr_1_6?keywords=12v%2Blithium%2Bbattery%2Bcharger&qid=1678848088&sr=8-6&ufe=app_do%3Aamzn1.fos.006c50ae-5d4c-4777-9bc0-4513d670b6bc&th=1

Jim F - CalgaryAB

9:45 PM

I like Carl's Solution, maybe connect several Hamster Wheels in Parallel to an 12v/24v Alternator.

Carl Ott

9:46 PM

Jim - Hamsters in parallel - sounds much greener than Lithium - Musk had better look out

Mike - thanks for that nice find - a hefty 20A battery charger...

Carl Ott

9:51 PM

~9:49pm - Doug D showed his kit of parts for a next robot - plywood / bass wood - aluminum rods to fold / open the wheels / wheels - motors WITH encoders - just one problem - day job demanding time...

Carl Ott

9:53 PM

This is a kit of parts for his dog robot... Will carry around as a backpack - with a motorized mechanism to lower the robot to the ground...

Jim F - CalgaryAB

9:54 PM

Doug D: Doctor Who K9 Robot Dog?

Carl Ott

9:56 PM

Doug is planning to do in a Steam Punk style... May even try to do an air pump bubbling air in a bottle with colored water - to look like a battery.

Jim F - CalgaryAB

9:57 PM

Comment: Great Stream! Thanks!

Jim F - CalgaryAB

9:58 PM

I am Microphone & Camera Shy, but not Text/Typing/Chat shy. Ask Harold Pulcher.

Carl Ott

10:04 PM

~10:03pm - Paul B- found some interesting articles- one from a guy who was let go when Google shut down a robotics group... worked for "everyday robots" - an Alphabet project

Carl Ott

10:05 PM

cool - plain English writeups on various topics. e.g., ML for Robots -

Carl Ott

10:08 PM

Thoughtful discussions for applying machine learning - e.g., for Perception (often works well) vs Behavioral (often difficult).

Another blog around using ML models outside of the realm where they're trained...

Paul Bouchier

10:08 PM

ML for logic: <https://generalrobots.substack.com/p/ml-for-robots-hybrid-learned-vs-end>

Another discussion of ML specialization vs. overfitting and issues achieving generalization.
<https://generalrobots.substack.com/p/ml-for-robots-specialization-vs-overfitting>