PlayStation Controllers Troubleshooting

There are many ways for us to troubleshoot a faulty PSP controller and its receiver:
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(Current as of 5/31/18 via Joshua)

We have 2 different types of receivers; Nx-v3 and Nx-v4. v3 is the older model that has started with Wizbots and as time went the orders came in as the v4 model. I don't know if the v3 was discontinued, but the file that we import into Mindstorms shows two different versions of the import file.

Some computers (most of the older ones) have the PSP Nx lean file and the newer computers have the same or the PSP nx-v4 file. I did a test this morning and found that the Nx-v3 all worked first time with no problems if I used a computer that had the old PSP Nx lean file. When I used the Nx-v4 receiver with the old version file then it did not work and the bot would just drive forward unlimited when placed in running mode.

With this I have used the Nx-v4 receivers only on the laptops that had the PSP Nx-v4 file imported and each receiver worked fine.

Each computer needs to also have both versions too (similar to the color sensor and color sensor v2 option in the drop menu).

One last note: I have followed this process to make sure it works...turn on NXT, connect data wire, turn on remote, press analog button once if red light is not blinking on remote, hold down small button located under analog button, press flashing red button on receiver once until it becomes solid red light. The controller and its interface should now be connected and ready to go. Don't forget to activate NXT to running mode.
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1. Place newly charged batteries into the controller.

2. Check receiver for breakage between receiver tower and its base plate. Use preventive maintenance on this piece by giving a speech to class (individual students that use the receiver) letting them know how fragile the connection is between the receiver tower and its base plate. Explain to them how to hold receiver by its base during installation and deconstruction of robot. Explain to them how the receiver needs to be installed on the robot in a protective manner. A roll cage can be built to

accommodate this concept if need be (which also goes toward their display of sound design for such purpose).

3. If robot does not work with controller, then check ALL data wire connections. One bad data wire connection will cause a blank in the command.

4. If only one motor of the two work, then check the data wire connection or replace with another data wire. (Can replace with a black data wire if the grey one does not work.)

5. If none of this helps, then try replacing the batteries or checking the connection by pressing and spinning the batteries while inside the controller.

6. If 1 through 5 does not work, then check the program thoroughly, download again. If it does not work, then try using another laptop. (Try downloading a faulty robot with controller/receiver on a laptop that some other kids working robot belongs to.)

7. Some more proven ways to troubleshoot; turn off NXT and controller then turn both back on.

8. Reinstall firmware on the NXT.

9. Unplug data wire from receiver then plug back in.

10. Replace the receiver only or you can replace the controller. NOTE: once have a working robot, put a matching sticker on the controller and receiver to indicate they are working together.
WHEN ALL ELSE FAILS AND YOU FEEL THAT YOU HAVE EXHAUSTED ALL POSSIBLE FIXES THEN GIVE IT TO ANOTHER MENTOR OR STUDENT BECAUSE USUALLY IT WORKS FOR SOMEONE ELSE RIGHT AWAY. SERIOUSLY! WHEN THIS DOES NOT WORK, THEN PLEASE INFORM JOSHUA OF A FAULTY CONTROLLER/RECEIVER AND HE WILL REPLACE IT FOR YOU.