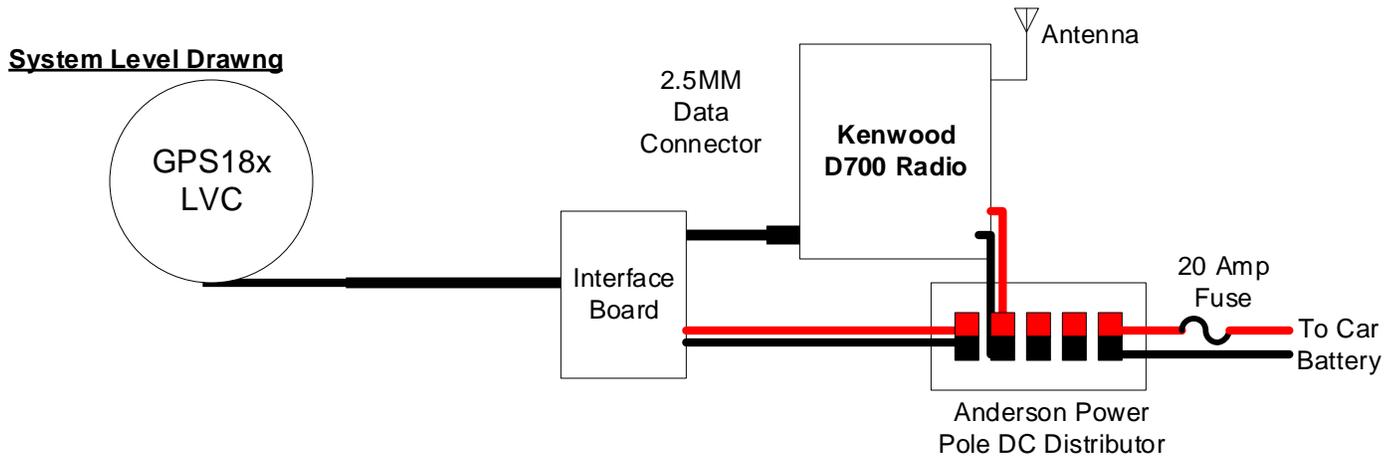


Interfacing a Garmin GPS18x LVC Puck to a Kenwood D700 Radio



After four years of continuous uses my Duelo GPS puck failed. As the Duelo serial Puck has been discontinued, a Garmin serial puck was purchased.

GPS18x LVC is provided with a 6 pin connector Garmin uses for testing and 5 meters (16.4 feet) of wire. Connector may be cut off without voiding warranty.

GPS18x LVC Puck runs off of 5Vdc, not 12Vdc.
 External 12Vdc to 5Vdc regulation must be provided or the puck will fail.
 Current draw at 5V is approximately 60ma.

- Color Code
- Red +5V
 - Black Ground (2 black wires, smaller gauge black wire is drain wire. Connect black wires together)
 - Yellow Measurement pulse out (Not Used)
 - Green Receive
 - White Transmit

Tech manual for Puck can be found at <https://buy.garmin.com/shop/shop.do?pid=27594>

The Puck as provided defaults to NMEA 0183 2.2 information, 4800 Baud. There were no changes made in the software.

White wire has pulses that can be seen with an oscilloscope, this is the TX or data out line. Pulses are plus and minus 2.5V

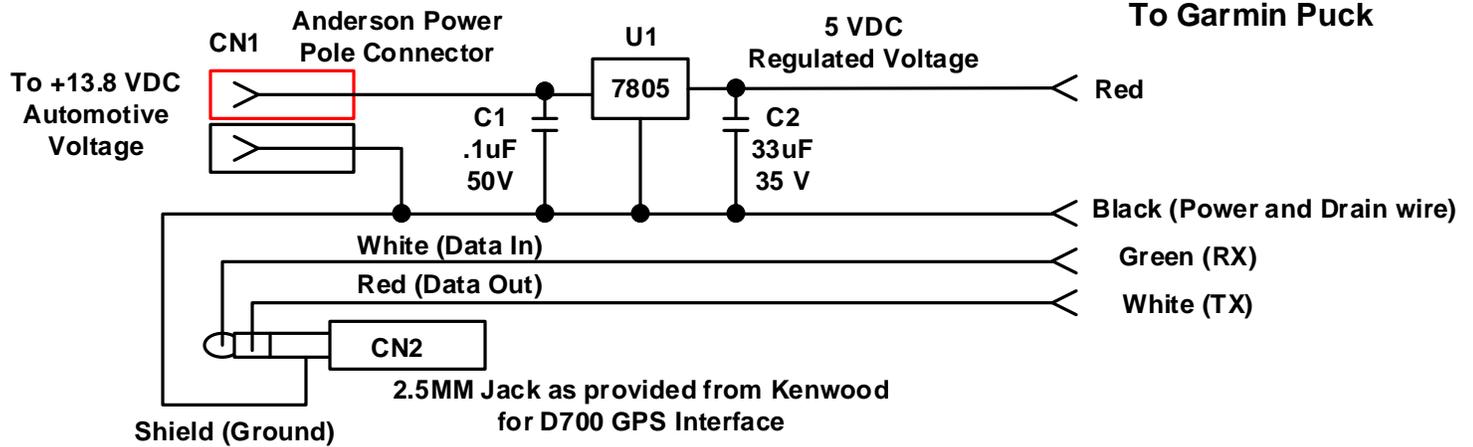
See next page for details.

Date	Revision/Addition/ Note	By:
May 12 2011	Initial Drawing	GSC

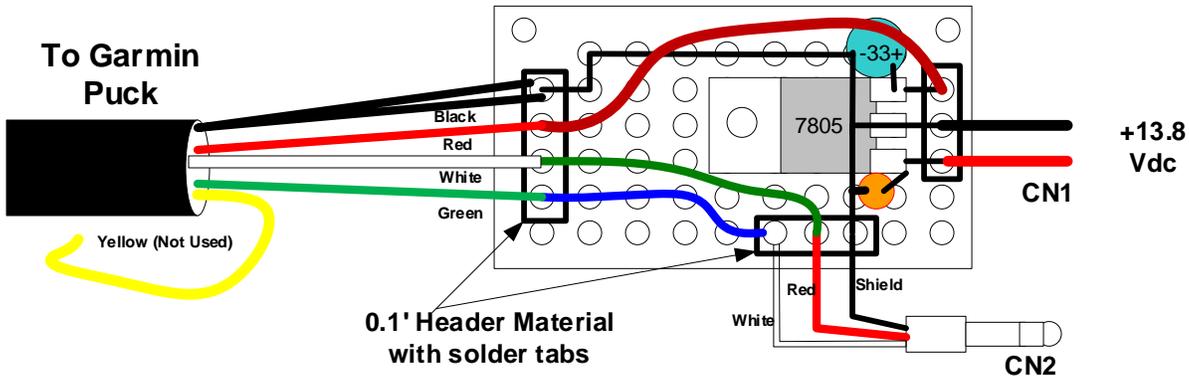
Drawn By:	Gerald Crenshaw WD4BIS	Date:	May 12 2011	From the bench of: Amateur Radio Station WD4BIS	Page of 1
Designed By:	Gerald Crenshaw WD4BIS	Date:	May 12 2011		
Checked By:	Janet Crenshaw WB9ZPH	Date:	May 12 2011	Title: Garmin GPS18X LVC serial Puck To Kenwood D700	Scale:

Interfacing a Garmin GPS18x LVC Puck to a Kenwood D700 Radio

Schematic Information



Proto Board Wiring



Materials List

- C1, 0.1uF 50V Capacitor
- C2 33uF 35V electrolytic Capacitor
- U1 7805 1Amp 5Vdc Regulator IC
- CN1 Anderson Power Pole connector Red/Black Pair, 15Amp
- CN2 2.5MM Stereo Jack (Provided by Kenwood with radio)
- Misc 1 Small Perfboard (Used 1/4 of a Radio Shack 276-148)
- Misc 2 .1" Header with solder tabs
- Misc 3 Solder
- Misc 4 Enclosure, used a small Pill Bottle or 2" of 3/4 PVC Pipe and two end caps.

Date	Revision/Addition/ Note	By:
May 12 2011	Initial Drawing	GSC
Drawn By:	Gerald Crenshaw WD4BIS	Date: May 12 2011
Designed By:	Gerald Crenshaw WD4BIS	Date: May 12 2011
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From the bench of:	Page 1
Amateur Radio Station WD4BIS	of 2
Title: Garmin GPS18X LVC serial Puck To Kenwood D700	Scale: