

Dataspeed Power Distribution FAQ and Troubleshooting Guide

May 10th, 2018

Power Distribution

- How can I turn power distribution channels on and off?
 - Touchscreen display in a cup holder mount, buttons inside the center console, startup/shutdown scripts, CAN message, Ethernet/LCM message
- How can I configure the power distribution?
 - Use PowerDistributionGUI.exe and its documentation.
- What is the power rating?
 - 9-18 volts, 15 Amps per channel continuous, 180 Amps total continuous
- Can I view the current of the 120V power inverter?
 - No. The current consumption of the inverter is not available.
- Can I connect a higher wattage power inverter instead of the 600W model?
 - Yes. See the Power Distribution Panel datasheet for a list of supported part numbers.
- What is the default mode change pin number?
 - 1234

Documentation

- Download the latest PowerDistribution.zip release from https://bitbucket.org/DataspeedInc/dataspeed_pds/downloads
 - CAN bus documented in the Vector CAN DBC format: DataspeedPowerDistribution.dbc
 - Datasheets for each module (including CAN message definitions)

Updating

- Download the latest PowerDistribution.zip release from https://bitbucket.org/DataspeedInc/dataspeed_pds/downloads
- Check the CHANGELOGs to see which modules need to be updated.
- Update the firmware of required modules with DataspeedBootloader.exe. This process is documented in DataspeedBootloader.pdf.

Troubleshooting

- There are no messages on the CAN bus
 - Check that your CAN tool is configured for 500kbit
 - Check that the CAN TERM switch is set to ON. A CAN bus requires at least one 120 ohm termination.
- Unable to turn channels on/off via CAN/Touchscreen/Switches
 - Check that the mode is AUTO or MANUAL, but not VALET. Valet mode prevents commands on all interfaces except USB.
 - Check that the CAN TERM switch is set to ON. A CAN bus requires at least one 120 ohm termination.
- The thermocouple on the Power Distribution Panel is reporting wild values.
 - There is a known hardware issue with the Power Distribution Panel thermocouple sensor where the value is prone to noise from nearby equipment such as the inverter remote cable. It is not recommended to trust the temperature reading from the thermocouple sensor. Hardware revisions A-F have thermocouple sensors. Hardware revision G uses a different digital temperature sensor to address this issue.
- Something else is not working.
 - Check that all modules have the latest firmware with DataspeedBootloader.exe and a USB cable.
 - If the issue still persists, contact [Dataspeed](#).