Omega JR
Troubleshooting Guide

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Notes

- Pump Brand
    - The Omega JR has to be configured for the correct Pump Brand in order to communicate correctly. This can be verified only through Diagnostics.
- Power Cycle
    - The Omega JR will lose prices when powered down and will need for prices to be resent upon powerup.
- POS 1 and 2
    - POS 1 and POS 2 are interchangeable ports, allowing more than one POS to talk to the Omega JR.
        - Each POS must only talk to unique pump ID's (POS 1 talks to odds, POS 2 talks to evens, for example.)
- PIPort 1 & 2
    - PIPort 1 is for dispensers 1-16 and requires one DBox (or Configurator).
    - PIPort 2 is for dispensers 17-32 and requires one DBox (or Configurator).

No communication on POS 1 or POS 2

- If connected to a POS (FuelMaster, QT POD, etc) there should be constant polling on the POS Port that the POS is connected to. The RX and TX LED's for that port should be flashing.
    - If they are not flashing at all, check the connection from the POS to the POS 1 or POS 2 of the Omega JR.
    - The POS ports are interchangable, so if the port that the POS is connected to isn't showing signs of communication, switch to the other port to eliminate the possibility of a faulty port.
    - Check the dip switch on the PC board of the Omega JR to confirm it is set for 9600 for both ports (switches 1 and 3 are set to ON)
- Use the OmegaJRTestUtility
    - The user will need a USB to serial adapter to make the connection to one of the POS ports. Remove the connection from the POS and only have the OmegaJRTestUtility controlling the Omega JR.
    - When using the utility, there will only be activity for the POS LED's when a key is pressed in the utility.
- If there is no activity for the POS LEDs, there is either a connection issue to the Omega JR from the POS, or there is a problem with the POS port(s) on the Omega JR.

RXD LED is on solid for a Bank

- This is an indication that there is an open loop. This is expected if you do not have anything connected to that port (usually the case with PIPORT 2.)
- Check the cable connection from the PIPort 1 (or 2) of the Omega JR to the PIPort of the DBox or Configurator.
- Check that the DBox or Configurator has power.
- If it is connected to a Configurator configured for Current Loop (which will likely also have one LED on solid), remove the blue harness from the 8 position connector in the Config and short pins 1 and 8 (the 2 outside pins) together using a paper clip or a pair of pliers. With these pins shorted, the RXD on the Omega JR and the LED on the config should go out.
    - If the LED's do not go out when the pins are shorted, there is likely a hardware problem with one or both pieces of equipment.

No communication on Bank 1 or 2

- If the Omega JR has prices sent to at least one hose of one pump, there should be communication started from the Omega JR to the DBox. On ASSM #9000-11-2111, this will be indicated by the PUMP 1 (or 2) RX & TX LEDs. On ASSM #9000-11-2211, this will be indicated by the BANK 1 (or 2) RXD & BANK 1 (or 2) TXD LEDs.
- Open Diagnostics and check in the Pump Block Data to see if there are prices stored for each dispenser.
    - If not, have the user attempt to send prices again through the POS.
    - Send prices using the OmegaJRTestUtility
    - If prices are still not in the Pump Block Data, check for proper communication to the POS ports

Omega JR Diagnostics

- Refer to Troubleshooting Guide - Accessing Diagnostics to make the connection to DIAG
- Once connected, press Esc to display the menu
- Dispenser Brand
    - The Omega JR is not set for a dispenser brand when it leaves the factory, so verification that it is set may be necessary.
    - At the top level menu, select D for Diagnostics Section, then see that Dispenser Interface 1 and 2 each have a brand set in the square brackets to the right. If they are not set correctly, refer to the Configuring the Dispenser Brand section of the Omega JR Installation Guide.
- Pump Block Data
    - You can confirm whether the POS is communicating with the Omega JR by looking in the Pump Block to see if there are prices showing for the dispenser(s) that the POS has configured.
    - Power cycle the Omega JR, then navigate to the Pump Block Data section of diagnostics (D/D/P). Once here, see that there are prices showing for each dispenser. The plus (+) and minus (-) keys will navigate to the next and previous dispensers.
    - If there are no prices for the configured dispenser(s), try to send the prices again from the POS, or use the OmegaJRTestUtility to send prices.
    - If after resending prices there are still none showing in this section, there is likely a communication issue from the POS to the Omega JR.
- POS communication
    - To view communications between the Omega JR and the POS, from the top level menu, select D for Diagnostics Section, P for POS Section, M for Monitor Port, then 1 or 2 to select the POS port to monitor.
- Dispenser Information
    - You can confirm that the Omega JR is getting a response from the dispenser(s) by checking the dispenser information to see if prices are showing for the dispenser(s) that the POS has configured. From the top level menu, press D/D/P/I. The plus (+) and minus (-) keys will navigate to the next and previous dispensers.
    - If there are no prices displayed in this section, the Omega JR is not receiving data from the dispenser(s). Try to send the prices again from the POS, or use the OmegaJRTestUtility to send prices.

- Dispenser communication
    - To view communications between the Omega JR and the dispenser(s), from the top level menu, select D for Diagnostics Section, 1 or 2 for the Dispenser Interface section needed, P for Pump Diagnostics, then M to monitor the communications.

Using the OmegaJRTestUtility

(Download: http://pie-corp.com/utilities/OmegaJRTestUtility.exe)

- Open the utility
- File/Serial Port Setup/COM Port/<select the com port for your serial port>
- File/Serial Port Setup/Restart
- Pump#/<select the fueling position number that you want to talk to>
- Pump/Prices/4_DIGITS/ONE
- Press the S key to check the Status
    - There should be a long Rxd string in the center of the window. There will be a couple of things in square brackets ([06] [02]) followed by 66 characters that will mostly be zeroes.
    - The first 2 characters are system status information.
    - Beginning with the 3rd and 4th characters, each set of 2 represents a pump's status. 3 & 4 represent Pump #1, 5 & 6 represent Pump #2, etc.

```
[06] [02]08020200000000000…
         #1#2
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    - Status

Bits	Status
00	Pump logged off
02	Idle (Pump logged on)
03	Handle is lifted, no authorization
0:	Authorized, no handle
0?	Authorized with handle. No flow
2?	Flowing
:7	Stopped with handle
6?	Drive away
92	Stopped, Sale Ready
12	Sale Ready

- Running a sale
    - Check the status to see if the pump is Idle (should be 02)
    - If so, lift the handle and check the status (should be 03)
    - Press the A key to send the authorization and check the status (should be 0?)
    - If the pump resets and is able to dispense fuel, check the status (should be 2?)
    - Hang up the handle and check the status (should be 12)
    - Press the C key to clear the sale and check the status (should be 02)
    - Press the R key to read the sale data
- Notes:
    - Shortcut keys are listed along the right of the screen.

- If you need to see prices change from a test price already sent from the utility, go to PPU Base and select a different price. You will then need to resend prices (Pump/Prices/4_DIGITS/ONE)
- Presets can be authorized in Pump/Authorize/