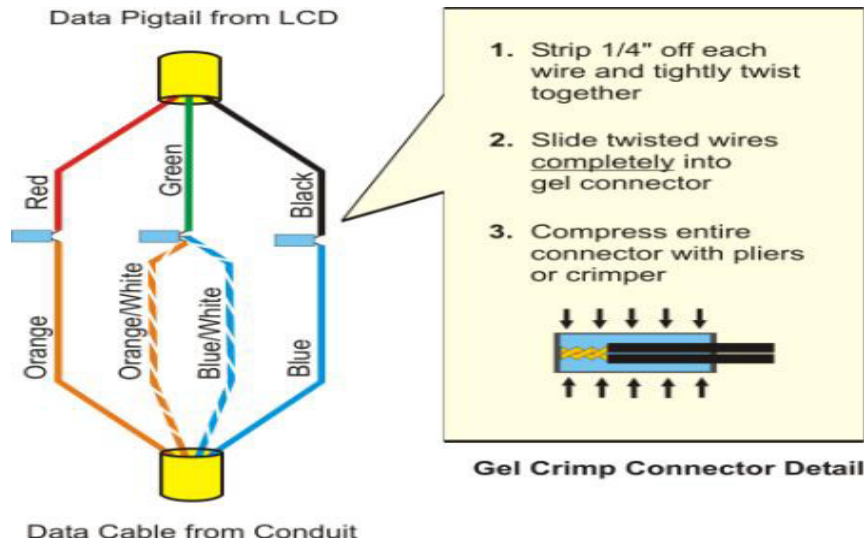




Troubleshooting a LCD 4X, 5X & 6.1 COD that is not responding (NR)

1. Check to see if the COD is turned on outside. The COD should be displaying the slide show.
 - a. If the COD is not powered on (blank/black) or stuck in boot up screen:
 - i. Check the power switch to ensure it is illuminated and in the “ON” position. Depending on the type of COD, the power switch may be located on the back of the unit, behind a small access cover, or inside the COD cabinet. This may require you to remove part of the COD shell to gain access to the switch.
 1. If the power switch is not illuminated - check the breaker inside the store. If it is already on, flip the breaker off and turn it back on to see if power is restored at the unit. If not, the store may require an electrician to verify power at the switch.
 2. If the switch is already in the “ON” position and is illuminated - turn the unit off, wait 60 seconds, and turn it back on. If this does not restore power to the display, or will not boot correctly, contact Everbrite at 888-877-3092.
2. Once you have verified that the COD has power and is showing the slide show screen, we will need to ensure all equipment inside and outside the store is properly configured.

a. Check data cable connections at the COD. If it is an LCD 4X, 5X or the 6.1 the data cable coming out of the conduit will connect directly to a yellow pigtail cable coming out of the display, red to red, black to black, green to green. In newer installs of the 6.1 and some replacements of the data cable, you may have Waterproof Cat 5 cable as a replacement. The color configuration is different; the connections with Cat 5 cable coming out of the conduit to the yellow pigtail will be solid orange to red, solid blue to black, and orange/white and blue/white to green. Call Everbrite Product Support @ 888-877-32092 for assistance with cable connections



b. Check cable connections at the converter box inside the store. The converter will be red and white and is typically located in the office, or in the drive through booth near register 12 or 14. If there are two CODs, there should be two converter boxes.

c. The data cable coming from the COD outside should run into the store through conduit and connect to the converter box on the "To OCS" port. Ensure that the yellow cable with the DB9 connector is not damaged/corroded and connected firmly to the converter box.

1. There should be a DB9 serial cable plugged into the From POS on the converter, this cable will connect to an Equinox box, located in the office by your computer equipment, - IP Address 10.0.0.151. Port number 1 (lower right hand port) is for COD 1, port number 2 (upper right hand port) is for COD if applicable.

2. The power cable for the converter box should be in the port labeled "DC In 9-12V".

NOTE - if all cable connections are correct and the converter is functioning properly, you should see a yellow "Power/Status" and a red "POS Active" light on solid. If there is communication coming from the NP6 register system, the green TX and red RX lights will flicker very faintly every 1.5 seconds. If you are using NP6 POS software, and the lights are not flickering, a reboot of the Equinox 151 hub may be

required and also a soft reboot of Registers 12 and/or 14. We also have to check that the routing table is set up correctly and also check to see if the COD's are enabled. If the lights on the converter are not as described above, contact Everbrite at 888-877-3092.

3. If all cable connections and lights on the converter look good, and orders are still not showing on the COD outside, a loop back test must be performed to ensure the Everbrite equipment is functioning properly. The steps required to run a loop back test are outlined below

Performing a loop back test

The purpose of the loop back test is to provide a secondary source of data to help determine if the COD, converter, and associated cables are communicating properly. The converter box mimics the register system and sends a test order to the COD to see if it is capable of displaying.

1. Disconnect the serial cable at the Equinox hub (port 1) the other end of the cable is connected to "from POS" port on the converter.
2. Connect the cable end removed from the Equinox hub / register into the "Test Data Output" port on the converter.
3. Press and hold the Test button located to the right of the Power / Status light. If proper communication has taken place, the Green TX LED will light steady for approximately 8 seconds and then will flash continuously. Let go of the Test button.
4. To ensure the COD is capable of displaying an order, we can stick a test message on the screen outside. To do this, press and hold the Test button. The amber "Test Active" LED will light. The green TX LED and the red RX LED will flash quickly. Release the Test switch.
5. The amber Test Active LED will remain on and the test message "99 Test item 99.99" is displayed on the COD screen. **If you are on an on-site tech, take a picture of the 99 test message on the screen so we can prove the COD was functioning while you were on site.**
6. Perform step 3 once again. The test message is erased from the COD display. The test is complete. The COD system passed the test.
7. Disconnect the cable from the "Test Data Output" port at the converter and reconnect it to port 1 on the Equinox box. The green TX and red RX lights should now be flickering faintly about once every 1.5 seconds. If not, soft reboot register 12.
8. If your store has 2 COD's, perform the same test on the second converter.

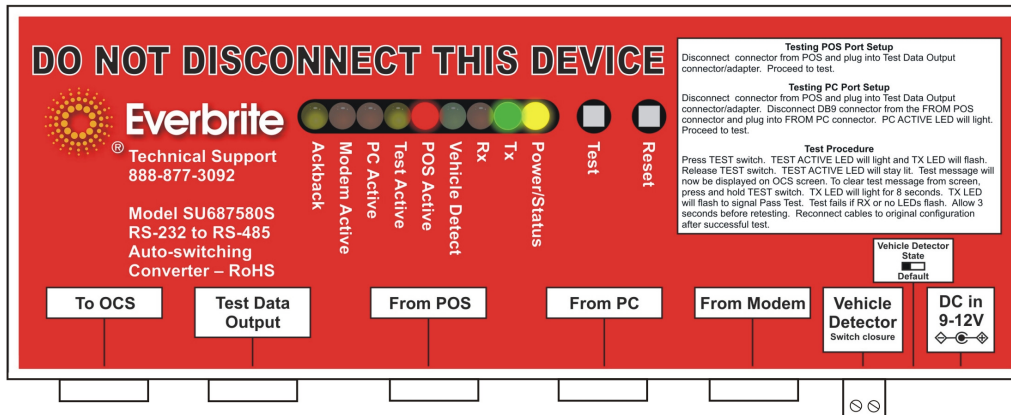
NOTE – If the loop back test is successful, and the 99 test message shows up, the Everbrite equipment is working properly. Site will need to contact RTS at 800-515-3636 to troubleshoot the register software. During step three if the amber “Test Active” light comes on but the TX light does not come on solid, the test is a failure. If this is the case, or if the lights do not act as described above, there is an issue with the Everbrite equipment. On the pages below, there are descriptions of all types of Everbrite converters with their functions and troubleshooting procedures Contact Everbrite at 888-877-3092 if you further assistance.



COD FUNCTION CHECKS

AUTO SWITCHING CONVERTER

Note: This model shown is the most recent model. (Other models could have one, two, or three ports.)



CONNECTION PORTS

Description

To OCS	Female DB9 connector for data cable to the OCS.
Test Data Output	Male DB9 connector provides a test message to OCS when the data cable is removed from the POS connector and connected here
From POS	Female DB9 input ports for data from the POS system/ systems
From PC	Female DB9 input port from the back office PC computer
From Modem	Male DB9 input from an optional modem
Vehicle Detector	Connected to the vehicle loop detector auxiliary relay contacts
DC in (9-12V)	AC adapter connection provides power to the converter.

LED INDICATORS	Color	Description
Power Status LED	Amber	Indicates power on
TX LED	Green	Indicates data is being transmitted from the POS system
RX LED	Red	Indicates that the RS485 converter box is receiving data from the OCS
Vehicle Detect LED	Green	Indicates vehicle detected when lit (No vehicle when not lit)
POS Active LED	Red	Lit when the POS has control of the converter box
Test Active LED	Amber	Lit when running the built in tester
PC Active LED	Red	Lit when the back office PC computer has control of the converter
Modem Active LED	Red	Lit when an optional Modem has control of the converter
Ackback LED	Red	This LED is for some PAR POS applications only and will light when the switch SW4 inside the converter is switched to the left "IN" position

SWITCHES	Description
Reset Switch (push type)	resets the memory circuitry in the converter
Test Switch (push type)	provides independent test data for testing the OCS system
Vehicle Detect Polarity Switch switch (slide type)	Located adjacent to the Vehicle Detector connection, this helps match proper polarity of the audio vehicle detector module with the converter.

VEHICLE DETECTOR (Optional)

If used, the vehicle detect function is connected to a dry (relay) contact in the vehicle loop detector module. When the GREEN Vehicle Detect LED lights, a vehicle detect message is sent to the OCS. The OCS will go into active or bright mode depending on the OCS and software installed. When the GREEN Vehicle Detector LED extinguishes, a "no vehicle present message" is sent to the OCS to return it to power save mode.

TYPICAL COMMUNICATIONS CYCLE

- Data is sent from the POS to the OCS. The converter green "TX" LED flashes.
- The OCS receives the command and responds by transmitting the data to the POS. The converter red "RX" LED flashes.
- When the OCS and POS have completed the data communication cycle, the converter returns to idle condition with both the amber "Power Status" LED and the red "POS Active" LED on steady.

The four major areas where hardware problems may occur are as follows:

1. The POS.
2. The converter.
3. The OCS.

4. The interconnecting cables between units.

LOOPBACK and POS PORT TEST

The purpose of the loop back test is to provide a secondary source of data to help determine if the OCS, converter, and associated cables are communicating properly.

1. Disconnect the serial cable at the Equinox 151 hub Comm 1. The other end of the cable is connected at "from POS" port on the converter.
2. Connect the cable end removed from the 151 hub to the "Test Data Output" port on the converter. Use a 10 ft. or 50 ft. serial extension cable if necessary.
3. Depress and hold the Test switch button. The Amber Test Active LED will light. **The Green TX LED and the Red RX LED will flash quickly. Release the Test switch.**
4. The Amber Test Active LED will remain on and the test message "99 Test item 99.99" is displayed on the OCS screen.
5. Depress and hold the Test switch. If proper communication response has taken place, the Green TX LED will light steady for approximately 8 seconds and then will flash continuously.
6. The test message is erased from the OCS display. The **test** is complete. The OCS system passed the test. (To test the **PC port** at this point, skip to PC PORT TEST below. If no PC port test is desired, proceed to #7 below.)
7. Disconnect the cable from the "Test Data Output" port at the converter and reconnect to the Equinox 151 hub Comm 1. Repeat the process if you have 2 COD's. The other serial cable will be plugged into Comm 2 of the 151 hub.

If the OCS system passes the test, contact the POS vendor for assistance with the POS system. If the proper response is **not** received from the OCS, **the Red "RX" LED will not flash nor will the Green TX light illuminate steady. This indicates an OCS failure.** If problems persist, contact Everbrite, Inc. Product Support at 888-877-3092

PC PORT TEST

1. Connect the serial cable "From PC" port on the converter to "Test Data Output" port on the converter. The Red PC Active LED will light.
2. Repeat the test procedure #3 to #6 above then proceed to #3 below.
3. Disconnect the serial cable from "From PC" port and "Test Data Output" port on the converter.
4. Reconnect the serial cable between "From POS" on the converter and the NP6 POS system



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