

# Troubleshooting Guide

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### *When the radio hop is operating normally:*

- The PWR lamp (green LED) is lighted.
- The TX ALM and RX ALM lamps (red LEDs) are extinguished (not lighted).
- The RSSI test jack voltage level (measured with a Voltmeter) is between 0 and 4.8 Vdc.
- A T1 (or E1) loopback test indicates no errors.

### Trouble Symptoms and Suggested Corrective Actions

No.	TROUBLE SYMPTOM	CORRECTIVE ACTION
1	No communication link between two Aurora radios in the hop and the PWR lamp (green LED) is OFF.	<ol style="list-style-type: none"> <li>1) Make sure the power switches on the radios at both ends of the hop are turned ON.</li> <li>2) Check the connections to the power source.</li> <li>3) Check the power source itself for availability of power.</li> </ol>
2	No communication link between two radios in the hop and the PWR LED is lighted.	<ol style="list-style-type: none"> <li>1) Make sure far-end radio is turned ON.</li> <li>2) Check the RSSI voltage level.</li> <li>3) Check all cables for proper and secure connections.</li> <li>4) Check the antennas for proper "line-of-sight" alignment.</li> </ol>
3	The TX ALM lamp (red LED) is lighted.	<ol style="list-style-type: none"> <li>1) The transmit output power level may be too low (3 dB lower than nominal).</li> </ol>
4	The RX ALM lamp (red LED) is lighted.	<ol style="list-style-type: none"> <li>1) Check the RSSI voltage level.</li> <li>2) Check the antennas for proper alignment.</li> <li>3) Check the transmit output power at the distant end; the power to the Rx end is too low.</li> </ol>
5	LOS Alarm	<ol style="list-style-type: none"> <li>1) Loss of signal (LOS) means the DS1/E1 signal is missing at the input of the modem board.</li> </ol>

(continued on other side)

6	BER is high; too many errors.	<ol style="list-style-type: none"><li>1) Check and make sure that the Transmitter Spread Sequence at the far end matches the Receiver Spread Sequence at the near end of the hop.</li><li>2) Rotate the polarization of the antenna at both ends of the link by 90 degrees.</li><li>3) If still no improvement is achieved after step 2), use the Aurora 5800 utility software and change the transmit and receive spread sequence numbers.</li></ol>
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**For detailed troubleshooting information, refer to Chapter 7 in the *Aurora Reference Manual*.**



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USA 1-800-227-8332 | Int'l (+1) 650-594-3800

Harris Corporation | 350 Twin Dolphin Drive | Redwood Shores, CA USA 94065

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