Data Cable for GSP-2900 Fixed Satellite Phone

Installation Instructions

©Revised July 2004
This document provides step-by-step instructions enabling the user to install the GSP-2900 Data Cable Kit.

1. Determine that the GSP-2900 contains software version 5.1.2.2A or higher. If this software is not present, the GSP-2900 it will not be data capable. Contact your point of purchase or Globalstar Customer Care for more information.

2. **Disconnect power from the GSP-2900 by removing the power cord from the outlet AND disconnecting the backup battery.**

3. Remove the front cover of the GSP-2900 by loosening the four thumbscrews (black in colour) this will allow access to the interface board.

4. Locate the small five-pin header connector on the board. (See picture below) and connect the mating 5 pin connector on the FUT data cable to the header. Ensure that the polarity is correct. Do not force, as breakage will result. Plug the RJ-11 male into the Telco test jack on the side of the interface board.
5. It is necessary to route both the power/RJ-11 (phone) and data cables out of the FUT through the same opening. Disconnect the black power/RJ-11 cable. Next, remove the Philips screw holding the “P” clip strain relief in place, and remove the red rubber grommet from the cable. Install the supplied “P” clip onto the FUT data cable, and position it with the flat side facing you. Re-install the metal “P” clip on the black power/RJ-11 cable with the flat side away from you. Install the Philips screw through both “P” clips and tighten securely.

6. Apply RTV silicone sealant to waterproof the cable exit area. (IMPORTANT)
7. Reconnect the power and RJ-11 wires to the 4 place terminal block
8. Replace the cover on the GSP-2900 and tighten the four thumbscrews securely.
9. Route the data cable along with the power/RJ-11 cable to the NID (Network Interconnect Device) box mounting location.

10. Mount the gray NID (Network Interconnect Device) in a convenient location near the existing power/RJ-11 NID.
11. Open the inner cover on the NID (Network Interconnect Device) to facilitate ground connection.

12. **It is vital to ground the NID (Network Interconnect Device) to prevent lightning and/or static discharge from damaging your computer equipment.** See picture below for location of ground wire in NID box. The ground wire should be a solid copper wire of at least 12 gauge. This wire should be connected to a ground rod or copper water pipe, which is buried in the ground.

13. Once proper ground connection is completed, close the inner door and secure with 3/8” nut driver or socket.

14. Connect a serial cable to the female DB-9 provided in the NID box. This cable should be routed through the black rubber grommet on the lower right side of the NID. Proper strain relief should also be applied (ty-rap) The serial cable should be NO MORE than 60 feet (18.3 Meters) between the computer and the GSP-2900. Longer cables may cause data errors and reduced performance. You may use a Category 5 type of cable with the necessary connectors to increase distance between the GSP-2900 and your computer.
For extremely long distances a RS-422 to RS-232 balanced line converter may be required.

15. Re-connect the back-up battery and power supply. Ensure that the GSP-2900 is working correctly by listening for dial tone on the desk set. You may also place a test call to verify proper operation. Dial #8378 to access a toll free voice only test number from within the N. American service area.

16. Install the Globalstar packet data modem driver using the provided CD. The baud rate between the GSP-2900 and computer MUST be set at 19200 for the computer to communicate with the GSP-2900. The CD for GSP-2900 will configure this setting automatically. For Windows XP you must install the modem driver manually. Contact Globalstar or your local dealer for support.

17. Connect to Globalstar Data Services by dialing “#777” from the computer via “Dial up Networking”

**Schematic Diagram of Data Cable**

Connections shown are on interface board in GSP-2900

DB-9 Female connector (In NID Box)

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RI</td>
</tr>
<tr>
<td>2</td>
<td>RTS</td>
</tr>
<tr>
<td>3</td>
<td>RXD</td>
</tr>
<tr>
<td>4</td>
<td>CTS</td>
</tr>
<tr>
<td>5</td>
<td>TXD</td>
</tr>
<tr>
<td>6</td>
<td>GND</td>
</tr>
<tr>
<td>7</td>
<td>CTS</td>
</tr>
<tr>
<td>8</td>
<td>RTS</td>
</tr>
<tr>
<td>9</td>
<td>RLSD</td>
</tr>
</tbody>
</table>

5 = GND
3 = RXD
2 = TXD
7 = CTS
8 = RTS
1 = RLSD
9 = RI

NID box for static and lightning discharge protection. Must be grounded!!!

Pin outs for DB-9 Shown

Must be connected to earth ground. Ground wire to be supplied by Customer/Installer