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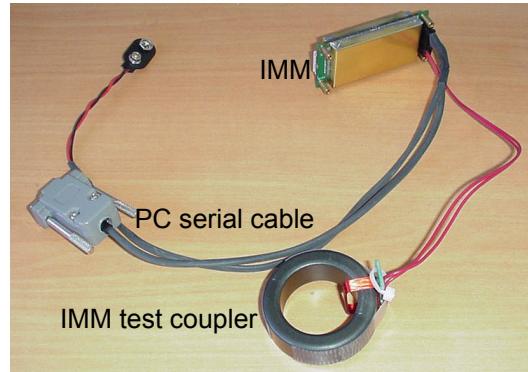
APPLICATION NOTE NO. 79

September 2005

Configuring Inductive Modem Module (IMM) for Logic Level Serial (LLS)

The IMM is shipped in Configuration Mode 7, ready to connect to a PC with a terminal program using RS-232.

1. Connect the PC serial cable and IMM Test Coupler to the IMM at J1 and J2.
2. Connect the PC serial cable to a PC serial port.
Run SEATERM or another terminal program. If using SEATERM, select Configure/SBE 37, and on the COM Settings tab select RS-232 mode. Select the appropriate COM port at 9600 baud, 8 bits, no parity, 1 stop bit. Select no flow control if using a terminal program other than SEATERM.



3. Connect a 9-volt battery to the PC Serial cable. The terminal program displays an IMM> prompt when you press Enter.

Note:

The IMM cannot communicate with Logic Level Serial (LLS) and RS-232 at the same time. There are two ways to switch between RS-232 and LLS; either method may be used through the serial connection or through the Inductive Modem (if the IM is enabled).

- The most direct method uses the **SETSERIALTYPE=0** and **SETSERIALTYPE=1** commands. Type 0 is LLS, Type 1 is RS-232. These commands do not change any configuration settings except the Serial Type. The IMM prompts the user to repeat the command, and then switches to the new Serial Type immediately.
- The other method involves setting a Configuration Mode. Configuration Modes are actually shortcuts that change Configuration Data to prepare for common tasks. There are currently only seven basic interface modes, but separate numbers are assigned for the same configuration in RS-232 and in LLS.

Configuration Mode Number		Description
RS-232	Logic Level Serial	
1	8	Hardware handshaking with simple host instrument
2	9	Serial handshaking with simple host instrument
3	10	Hardware handshaking with simple buoy controller
4	11	Serial handshaking with simple buoy controller
5	12	Hardware handshaking for symmetric communication
6	13	Serial handshaking for symmetric communication
7 (default)	14	Terminal program symmetric communication

4. To switch the IMM to Logic Level Serial, type **SETSERIALTYPE=0** and press Enter. The IMM prompts the user to repeat the command.

Note: In response to the repeated command, the IMM immediately switches to Logic Level Serial and no longer communicates via RS-232. The IMM can be switched back to RS-232 with **SETSERIALTYPE=1**, or **!iSETSERIALTYPE=1** over the Inductive Modem.