SPECIAL FACTORY CONFICURATION

Fiber Optic Module Number OLC-485-85-D-ST has been configured at the factory to provide general purpose RS-485 communication. All Network Baud Rate and Diagnostic Select switch settings are identical to OLC-DSL switch designations, which are given in Tables 8 and 25 in the attached Users Manual. Connector wiring information and pin definitions are given below:

J1 Connector Pin Number (1)	Signal Name
1	RxD+ Input (2)
2	RxD- Input (2)
3	TxD+ Output (2)
4	TxD- Output (2)
5	Shield (3)
6	Chassis Ground
7	External +5VDC
8	External +5VDC Return

J1 CONNECTOR DEVICE
INTERFACE PIN DEFINITIONS

(1) Orientation – Top to bottom on front of module (Pins 1 thru 8 respectively). (Note: All unused connector screw terminals should be fully seated.)

(2) All RS-485 devices on the hardwire network stub must be interconnected for either 2 wire or 4 wire operation. For 2 wire operation jumper OLC J1 pin # 1 to 3 (TxD+ to RxD+) and pin # 4 to 2 (TxD- to RxD-), and interconnect all devices on the hardwire network stub "Tx/Rx+" to "Tx/Rx+", and "Tx/Rx-"to "Tx/Rx-". A 120 ohm resistor (supplied with every OLC) must be located at each end of the hardwire segment. For 4 wire operation all of the devices on the hardwire network stub must be interconnected "Tx+" to "Tx+" and "Tx-" to "Tx-" (Transmit Outputs), and these lines should be connected to OLC "Rx+" and "Rx-", respectively (Receive inputs). Similarly, the receive data inputs must be interconnected "Rx+" to "Rx+" and "Rx-"to "Rx-", among the RS-485 devices on the hardwire network segment, and should be connected to the OLC "Tx+" and "Tx-"transmit outputs, respectively. A 120 ohm termination resistor must be connected across "Rx+" and "Rx-" on each OLC (pin #s 1 and 2), and "Rx+" and "Rx-" at the device on the opposite end of each hardwire network stub… for 4 wire operation.

(3) All of the devices on the multi-drop RS-485 network stub (including the OCM) should have their Shield signals interconnected via the shielded cable drain wire… but only one device at one end of the hardwire RS-485 network stub should have Shield and Chassis Ground jumpered together. (To connect Shield to Chassis Ground at the OLC, J1 Pin 5 should be wired to the nearest Earth Ground/Chassis Ground connection.)

If the OLC is not connected to any RS-485 devices (i.e. used as a fiber optic repeater on the network) it should have the J1 Connector Local Interface Disabled. See Interactive Diagnostics in Section 1.3.3 of Users Manual for more information.