Liteway, Inc.

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DX-7001 RS-422 Field Test Procedure

1. Set the DX-7001 to be tested to the RS-422 mode by setting the DIP switch as follows:
   Positions 2, 5 and 6 ON
   All other positions OFF
   Both rear panel Alarm DIP switches OFF
2. Connect operating power (+12 to +15 VDC) to the DX-7001 to be tested. Do not connect the fiber optic cable. Connect the positive (+) power lead to the **Pwr** connector terminal position 2 and the negative (–) power lead to the **Pwr** connector terminal position 3. Do not make any connection to the **Pwr** connector terminal position 1. Verify that only the **Pwr** indicator lights. If not check voltage input with a digital voltmeter (DVM).
3. Connect a DVM with the positive (+) lead to terminal 4 of **Data** connector. Connect the negative (–) lead to terminal 5 of the **Data** connector. Verify that the reading is approximately -5 volts DC.
4. Connect 1.5 volt battery with the positive (+) lead of the battery going to terminal 2 of the **Data** connector and the negative (-) lead of the battery going to terminal 1 of the **Data** connector. Verify that the DVM still reads -5 volts DC and that only the **Pwr** indicator lights.
5. Reverse the polarity of the 1.5 volt battery so that the positive (+) lead of the battery now goes to terminal 1 of the **Data** conector and the negative (-) lead of the battery now goes to terminal 2 of the **Data** connector. Verify that the **Td** indicator lights and the DVM still reads -5 volts.
6. Remove the positive (+) lead of the 9 volt battery. Verify that the **Td** indicator goes off but the DVM reading does not change (still reads -5 volts).
7. Connect a fiber optic jumper from the **Td** optical port of the unit being tested to the **Rd** optical port of the same unit. If the unit is a multi-mode fiber unit be certain that multi-mode fiber is used. If the unit is a single-mode unit be certain that single-mode fiber is used. Verify that the DVM still reads -5 volts and that only the **Pwr** indicator lights.
8. Reconnect the positive (+) lead of the battery to terminal 1 of the **Data** connector and the negative (-) lead of the battery to terminal 2 of the **Data** connector. Verify that the **Td** indicator lights, the **Rd** indicator lights and that the DVM now reads approximately +5 volts.

If all of the above tests are completed as indicated the RS-422 mode operation of the DX-7001 being tested appears to be operating correctly.