

Dimension[®] Operating Modes

The following is an explanation of the operating modes that the Dimension[®] uses.

Send/ID Receive

Functions the same as Send/Receive Mode. This mode supports Bar Coded Tubes. In addition, this mode will initiate a query (I) to the host if a barcode label is scanned for a sample number not found in the dimension sample status buffer. Send/ID Receive is the most common mode used by LIS companies.

Send/Receive Mode

This mode will send out a poll message to the LIS every 15 seconds. The LIS must respond to this message within 1 second or the Dimension[®] will poll again in 15 seconds. If no response is received after 3 retries, then the Dimension[®] will display a DMW HOST COMMUNICATIONS ERROR. This mode also allows the LIS to send or download sample requests to the Dimension[®], which will accept only samples with valid test names. This mode does not support Bar Coded Tubes.

Send Only Mode

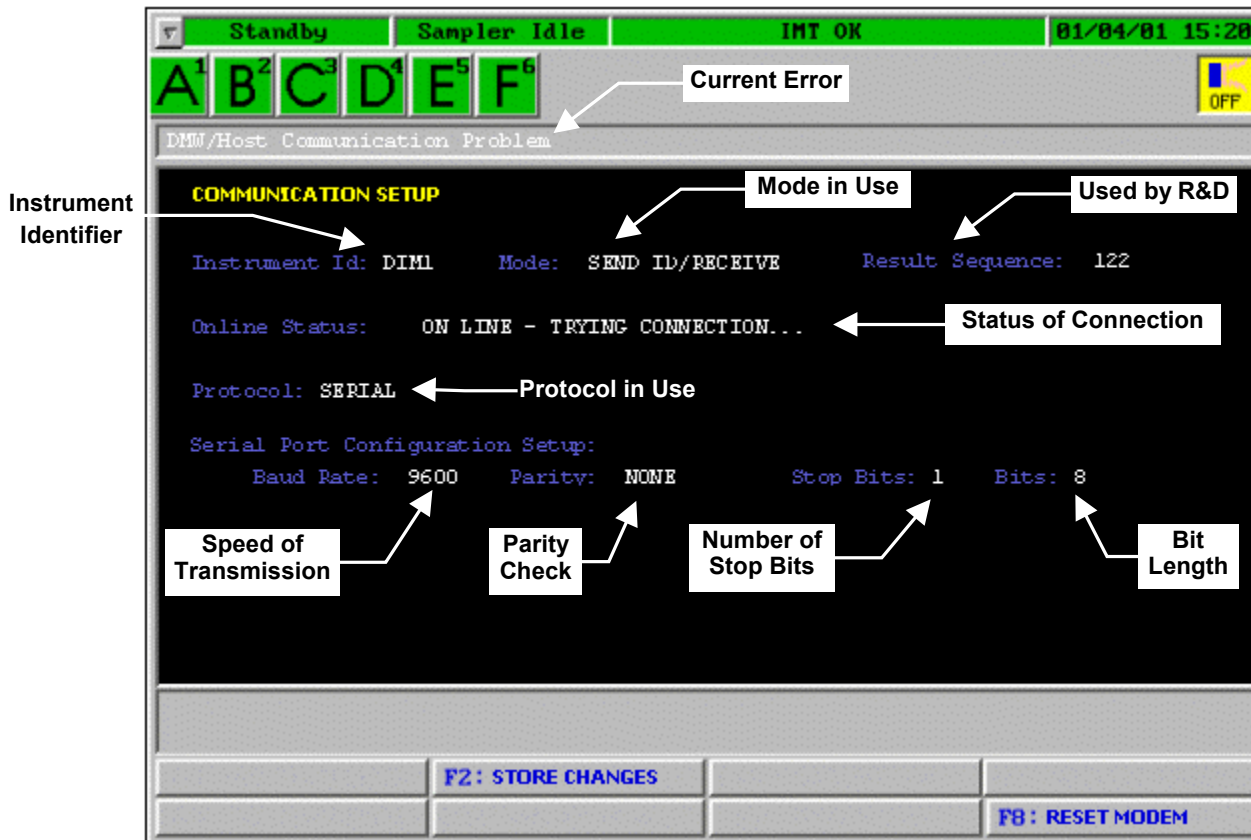
This mode sends test results to the LIS in the Dimension[®] format. It requires that the LIS send back an ack (acknowledgement) to the Dimension[®] when the results are received. If no such ack is received, then the Dimension[®] will retransmit the result up to three (3) more times. If no ack is received, then the Dimension[®] will display a DMW HOST COMMUNICATIONS ERROR on the screen. The LIS cannot download tests to the Dimension[®] in this mode.

ACA Terminal Mode

Default mode after installation. This mode sends data to the LIS in the ACA format for each test that is run. It transmits each test individually and requires no acknowledgement back from the LIS. The LIS cannot download tests to the Dimension[®] in this mode.

Explanation of the Communications Screen

Figure 16-3. Communications Screen



Following the hookup and software configuration there should be a DMW/HOST Communications error on the screen. Check the following:

- Are pins 2 and 3 lit on the indicator box? If not check the cable configuration.
 - After you press reset, does the error recur?
 - Turn on “noisy” to see if any data is coming across. If not, check the LIS. To turn on “noisy”:
 - Press SYSTEM CONFIG.
 - Type “noisy” as the password.
- The printer should display data from the Dimension[®] and the LIS.
- If there is no “noisy” printing out, check to see if you are in the correct mode (Send/Receive or Send ID/Receive).
 - Reboot if no “noisy” is printing.

Note: “noisy” only displays *good data* and does not give an accurate representation of the data being sent out the data port (S1). If the Dimension mode is not OFF and nothing prints out on “noisy,” then power down to the console, choose #3, turn off the power for one minute, then reboot.

Figure 16-4. Example of a “noisy” Printout

Poll Message

Dimension:<STX>P<FS>Dim1<FS>0<FS>1<FS>0<FS>B8<ETX>

Computer :<ACK>

Poll message from Dimension®

Computer :N<FS>6A

Responses from LIS

Dimension:<ACK>

Dimension:<STX>P<FS>Dim1<FS>0<FS>1<FS>0<FS>B8<ETX>

Computer :<ACK>

Computer :N<FS>6A

Dimension:<ACK>

Result Message

Dimension:<STX>R<FS>0<FS>THERRIEN/Diane<FS>0041187<FS>1<FS>E5<FS>0<FS>313511210699<FS>1<FS>1<FS>3<FS>IRN<FS>19<FS>umol/L<FS><FS>XUIS<FS>34.54<FS>mAU<FS><FS>GLU<FS>5.0<FS>mmol/L<FS><FS>35<ETX>

1 second time
limit if direct
to host

Computer :<ACK>

Result message from Dimension®

Computer :M<FS>A<FS><FS>E2

Acknowledgement from host

Dimension:<ACK>

Accept/Reject message from LIS

Download from LIS Barcoded Tube

Barcode label sample ID

Dimension:<STX>I<FS>0090586<FS>ED<ETX>

Computer:<ACK>

Barcode tube request from Dimension®

Download

Computer

Inquiry (Send/ID Receive Mode)

:D<FS>0<FS>0<FS>A<FS>NOWAK/Tadeusz<FS>0090586<FS>1<FS>URGE<FS>1<FS>S<FS>1<FS>*<FS>1<FS>8<FS>ALT<FS>AMY<FS>AST<FS>CK<FS>CREA<FS>LDH<FS>ALP<FS>BUN<FS>A2

LIS sends a download

Dimension:<ACK>

Dimension:<STX>M<FS>A<FS><FS>A<FS>1<FS>*<FS>D2<ETX>

Computer :<ACK>

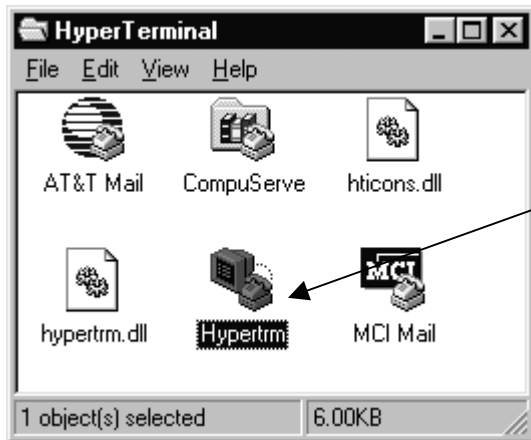
Dimension message accepts download

Verifying that the Dimension[®] is Transmitting Data

If “noisy” is not present and the mode is *Send/ID Receive* or *Send/Receive* then follow this procedure to verify that the Dimension[®] is transmitting data and that there is no problem with the software or connector on the rear of the instrument. You will need a cable, part number **270767.007**, available from WPC. Connect one end to the Dimension and the other to your laptop.

Using your field laptop complete the following:

Figure 16-5. HyperTerminal Window

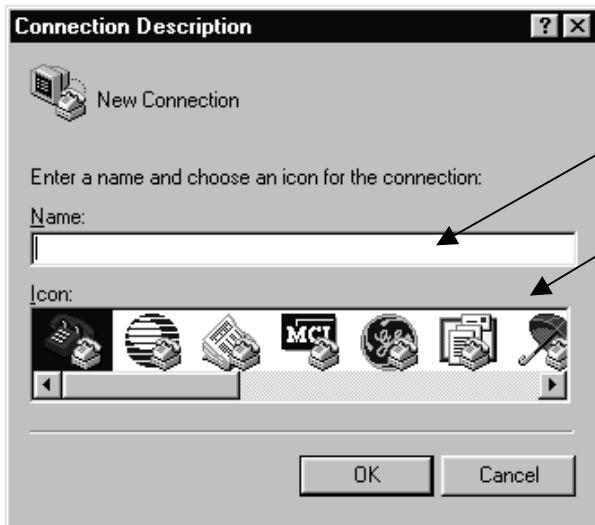


1. From the **START** menu, select **PROGRAMS**, **ACCESSORIES**, **COMMUNICATIONS**, and then **HYPERTERMINAL**.

2. Double-click the **Hyperterm** icon.

The *Connection Description* window will appear, shown at left, below.

Figure 16-6. New Connection Window



3. Type a Name for the new connection, such as: ***DIM-LIS Connection***.

4. Select an icon from the icon window.

Figure 16-7. Connect To Window

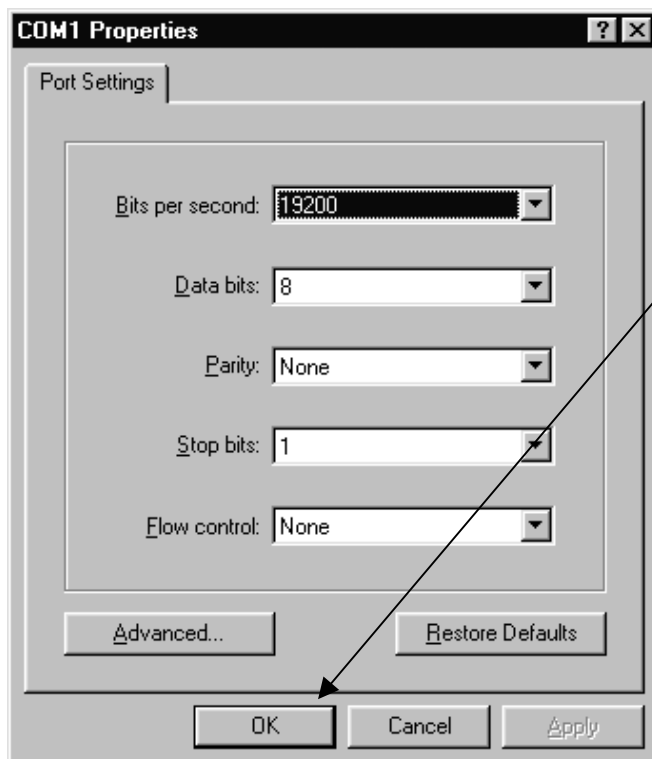


Next, the **Connect To** window appears.

5. In the **Connect using** drop-down box, select **Direct to COM 1**.

6. Click **OK**.

Figure 16-8. COM1 Properties Window



The **COM1 Properties** window appears.

7. Select the proper Baud Rate, Data bits, Parity, and Stop bits, used by the LIS.

8. Click **OK**.

Data should appear on the screen at approximately 10-second intervals, depending on the mode the instrument is in.

9. If no display appears, check the cable, and then reboot.

10. If there is still no display, then the Dimension® is either configured incorrectly or the (S1) port is defective.