

## 5... HYPERCOMM™ SERIAL COMMUNICATIONS

### OVERVIEW

Upon launching HyperWare, the *HYPERCOMM* window (Figure 5... -1) will appear with graphic images of a PC with a connected PCMCIA card drive (optional) and a HyperLogger. From within this window, communications between the PC and the HyperLogger as well as communications between the PC and the PCMCIA card drive are initiated and handled.

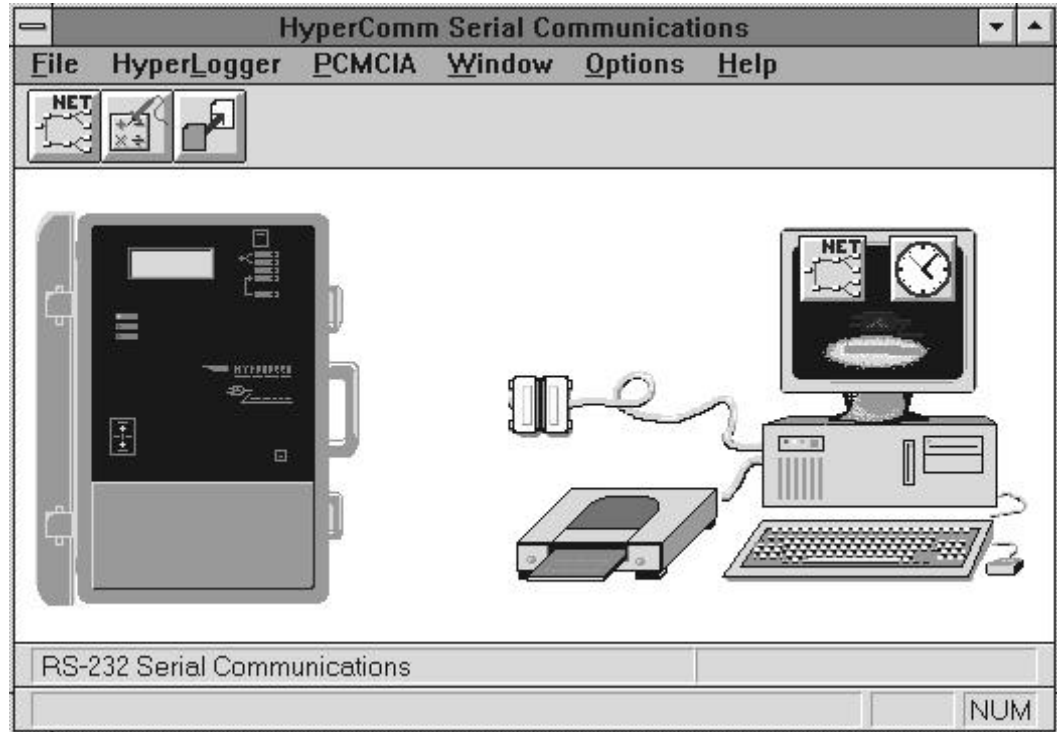


Figure 5... -1: HyperComm serial communications window (no serial connection)

The external PCMCIA card drive is an optional system item. Data and Program Net information is transferred between the PC and the PCMCIA card drive by simply dragging and dropping the appropriate icons overlaying the PC and the drive. Chapter 6 contains details on the setup and use of the PCMCIA card feature.

In serial communication between the HyperLogger and the PC, both RS-232 and telephone modem communications are supported. A simple dialog box is provided for the communication link setup, thereafter all communications are handled by dragging icons (representing information) between the graphic PC and HyperLogger.

Communications between the PC and a connected HyperLogger are required for a multitude of functions including download of HyperLogger collected data, programming of the HyperLogger, and real-time data display.

From the HyperComm window, access to the *HYPERNET*, *HYPERTRACK*, and *POST-PROCESSING* windows is achieved by clicking on one of the three buttons on the Button Toolbar.

## ESTABLISHING AN RS-232 LINK

### ***RS-232 Hardware Connection:***

Select and plug in one of the provided DB-9 to RJ-12 adapters to fit the PC serial port desired for HyperLogger communications. A 9-pin and a 25-pin adapter are provided with the HyperLogger. Plug one end of the provided RS-232 cable (CAR-4) into the adapter modular jack and the other into the Serial Port jack on the front of the HyperLogger and turn HyperLogger System Power ON.

### ***HyperComm Connection via RS-232:***

After launching HyperWare and display of the opening screen, the *HYPERCOMM* window will be displayed. Move the cursor over the graphic DB-25 type connector (center of the screen on the cable) and double-click to bring up the *SERIAL COMMUNICATIONS* dialog box (Figure 5... -2).

Figure 5... -2: Serial Communications setup dialog box (RS-232 mode)

For RS-232 communication, insure that the *USE MODEM* check box in the *MODEM CONTROL* section is not checked.

Select the *PORT* using the pull-down list boxes under the *PORT PARAMETER SECTION*. Select the port to which the RS-232 adapter is connected. For RS-232 communications 19,200 Baud is automatically selected and will provide the fastest data transfers..

**TIP:** If the port number is unknown, select one of the ports then attempt to connect (see following). If unsuccessful, change the selected Port and try again.

After selecting the port, click on the *CONNECT* button to initiate communication with the HyperLogger. At this time, HyperWare will attempt to communicate with the HyperLogger. Close the *SERIAL COMMUNICATIONS* dialog box by clicking the OK button and HyperWare will return to the *HYPERCOMM* window ready for communication.

If the link fails, check the following:

- ◆ Is the cable connected?
- ◆ Is the **Logic Beach supplied** adapter used?
- ◆ Insure that the adapter used is the one that was supplied with the HyperLogger. (other Logic Beach products use other similar looking but functionally different adapters)

**NOTE:** LBI supplied adapters are wired for proper compatibility between the HyperLogger and the PC. If an alternatively sourced adapter is used, insure that it complies with the wiring specified in Appendix I.

Also, adapters that convert DB-25 to DB-9 (and vis-a-versa) commonly cause problems. Utilize the proper adapter supplied with the HyperLogger (both DB-9 and DB-25 are supplied).

- ◆ Is the HyperLogger power ON?
- ◆ Select another serial port from within the *SERIAL COMMUNICATIONS* dialog box and retry.

## ESTABLISHING A TELEPHONE MODEM LINK

### **Modem Hardware Configuration:**

Before attempting a link to a HyperLogger via telephone modem, insure the following equipment requirements are met:

- P The HyperLogger must have a MM-14.4 or MM-2400 Modem Option installed. *This modem is referred to as the remote modem in this manual.*
- P The PC must have a Hayes compatible modem installed or connected and powered. *This modem is referred to as the local modem in this manual.*
- P Info on the PC modem capabilities must be on hand (ie Baud rate capabilities, installed port, etc)

### ***HyperComm Connection via Modem:***

Launch HyperWare and after the opening screen, the *HYPERCOMM* window will be displayed. Move the cursor over the graphic DB-25 type connector (center of the screen on the cable) and double-click to bring up the *SERIAL COMMUNICATIONS* dialog box (Figure 5... -2).

Click on the *USE MODEM* check box under *MODEM CONTROL* and the dialog will change slightly (Figure 5... -3) to enable editing of parameters in the *MODEM CONTROL* section. Edit the various parameters within the *MODEM SERIAL COMMUNICATIONS* dialog box per the following guidelines:

#### ***Port:***

Specify the *PORT* using the pull-down list box under the *PORT PARAMETER SECTION*. Select the port to which the modem is connected.

***TIP:*** *If the port number to which the modem is connected is unknown, select one of the ports then attempt to connect (see following). If unsuccessful, change the selected Port and try again.*

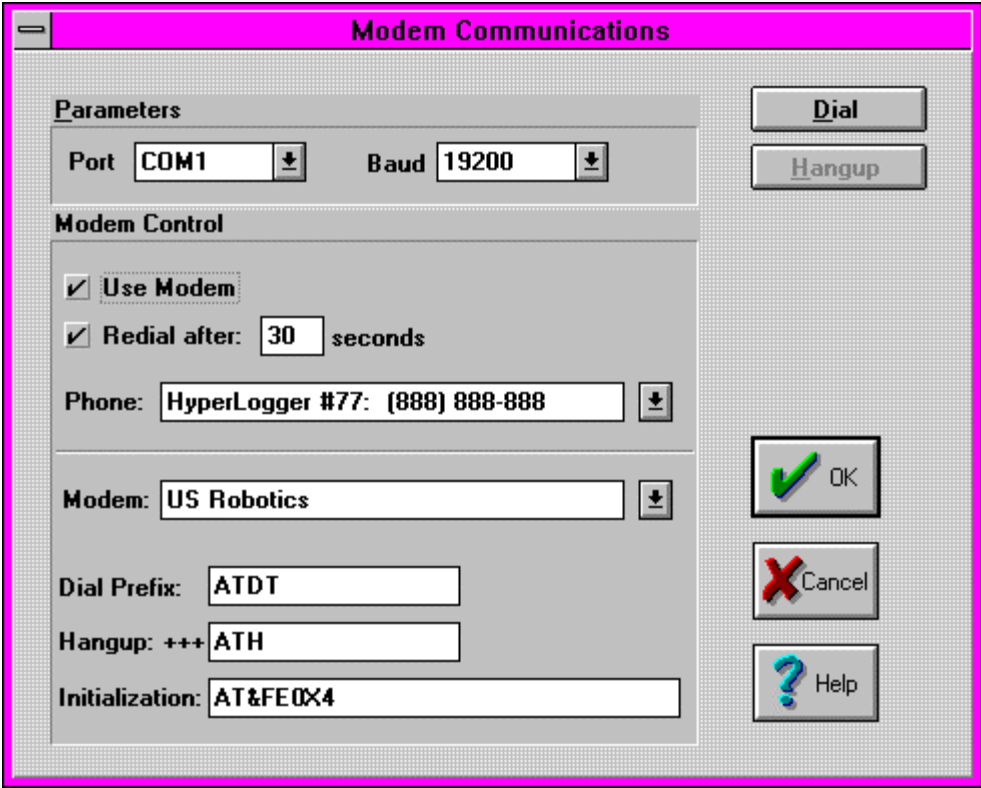


Figure 5... -3: Serial Communications setup dialog box (Modem mode)

**Baud:**

Specify the baud rate rate that will be used to communicate between the PC and the local modem. Set this baud rate per the following

Local Modem Capability	Set Dialog Box Baud To:
1200 baud	1200 baud
2400 baud	2400 baud
9600 or faster baud	19,200 baud

Table 5... -1: Local modem settings

table:

**FYI:** The remote modem (at the HyperLogger) will automatically adapt to the baud rate of the calling modem.

**Redial:**

If this box is checked, HyperWare will automatically make another attempt to call the HyperLogger if the first attempt fails for any reason. The time specified in the edit box is a delay time to wait before attempting the next call.

### **Phone:**

A short dialing directory of frequently called HyperLogger numbers can be maintained using the List Box provided.

#### **ADDING A NEW DIRECTORY ENTRY:**

To add a directory entry, use conventional text editing commands to highlight then type over an existing entry. The entry will not be lost and a new entry will be added.

The format for the directory entry consists of text followed by a colon, then the phone number.

USER TEXT:619-555-1212

The phone number may contain numbers, hyphens, parenthesis and commas with the following action:

- ◆ Numbers - digits 0 through 9 are dialed
- ◆ Hyphens and parenthesis - ignored during dialing
- ◆ Commas - insert a two second delay during dialing. Delays may be required for accessing an outside line on some phone systems.

#### **EDITING AN EXISTING DIRECTORY ENTRY**

Select the entry to be edited via the drop down list box. Using the mouse, highlight the text to be edited and type in corrections.

#### **REMOVING DIRECTORY ENTRIES**

The phone list is maintained within the hyperlog.ini file. This file is located in the Windows directory and can be edited with any text editor. Before editing this file, close the HyperWare application and make a backup copy of the hyperlog.ini file in case it needs to be restored. Two lines in the hyperlog.ini file need to be deleted to properly remove a phone directory entry. Follow these steps to remove the directory entry:

1. Close the HyperWare application.
2. Locate the hyperlog.ini file in the windows directory and make a copy of it (eg hyperlog.bak)
3. Using Notepad, open hyperlog.ini
4. Locate the section titled [Modems]
5. Locate the line starting with *PhoneX=* where X is a number and the entry to the right of the equal sign is the entry to be removed.
6. Make a note of the value of X. Then delete the entire line starting with *PhoneX =*
7. Locate and delete a second line with the same value of X that starts with *ModemX=* which will be located in the same section.
8. Save and Exit the editor. Re-launch HyperWare and check that all is well.

### **Modem:**

HyperComm includes the standard configurations for three major modem brands, Hayes Compatible, US Robotics, and Zoom. Refer

to the modem's manual for the command set used by the modem installed at the PC. Note that most modems (although not necessarily manufactured by Hayes, US Robotics, or Zoom) can utilize one of these three configurations.

Clicking on the Modem list box and selecting the desired modem will automatically configure the various modem parameters to meet most User's needs.

If a modem with a command set different from the supplied three is used, a custom Modem Type entry can be added to the Modem list box. To enter a custom Modem Type, the Dial Prefix, Hangup command, and Initialization strings need to be added. Refer to the User's manual supplied with your modem and follow these steps to add a custom Modem Type entry:

1. Click on the Modem list box arrow and enter a new Modem configuration name.
2. Edit the Dial Prefix text box with the command required by your modem. Upon commencing of dialing, this Prefix string is sent immediately before the phone number. For most modems this will be ATDT (if touch-tone dialing is supported by the phone line) or ATDP (for pulse dialing on phone lines not supporting touch-tones)
3. Edit the Hangup text box for the requirements of your modem. Most modems will use ATH. The Hangup string is transmitted to the modem when the User clicks on the Hangup button from within the Modem Communications dialog.
4. Edit the Initialization text box for your modem's requirements. A multitude of variations are possible for this initialization string and the modem User's manual should be referenced carefully. The initialization string is sent to the modem immediately after clicking on the Dial button within the Modem Communication dialog. Key parameters to specify in the modem initialization string include:
  - P Verbal Response codes ENABLED
  - P Full Response code set ENABLED (eg Busy, Connect 14400/ARQ, etc)
  - P Echo DISABLED (off)
5. Clicking on the OK button saves the three strings to the Modem Type name specified in the Modem list box.

After configuring all modem parameters, click on DIAL and the modem connection sequence will commence. After a short dialing and communication protocol negotiation between the modems, a dialog box will show indicating success or failure in making the link.

If successful, click OK . Close the *SERIAL COMMUNICATIONS* dialog box with another OK and HyperWare will return to the *HYPERCOMM* window ready for communication.

If the link fails, check the following points:

- ◆ Is the PC to modem cable connected? (external modems only)

## 5... HYPERCOMM™ COMMUNICATIONS

- ◆ Is the modem power ON? (external modems only)
- ◆ Is the local modem port selected correctly? If in doubt, select another serial port from within the *SERIAL COMMUNICATIONS* dialog box and retry.
- ◆ Is the selected baud rate correct for the modem?
- ◆ Is a working telephone line connected to the modem?
- ◆ Is there another device using the telephone line (i.e. a fax machine)
- ◆ Does the modem work with other communication programs? If not, this may indicate that the modem port is conflicting with another serial port.

Additional modem configuration and troubleshooting information is supplied within Appendix K.



### VISUAL COMMUNICATIONS VIA HYPERCOMM™

Once the serial link (via RS-232 or modem) is established, a complete cable will show between the HyperLogger and the PC and additional icons will overlay the HyperLogger graphic (Figure 5... -4). Depending on the type of link established, a modem or DB-25 connector will display in the middle of the cable. At this time, control and interrogation commands can be sent to the HyperLogger.

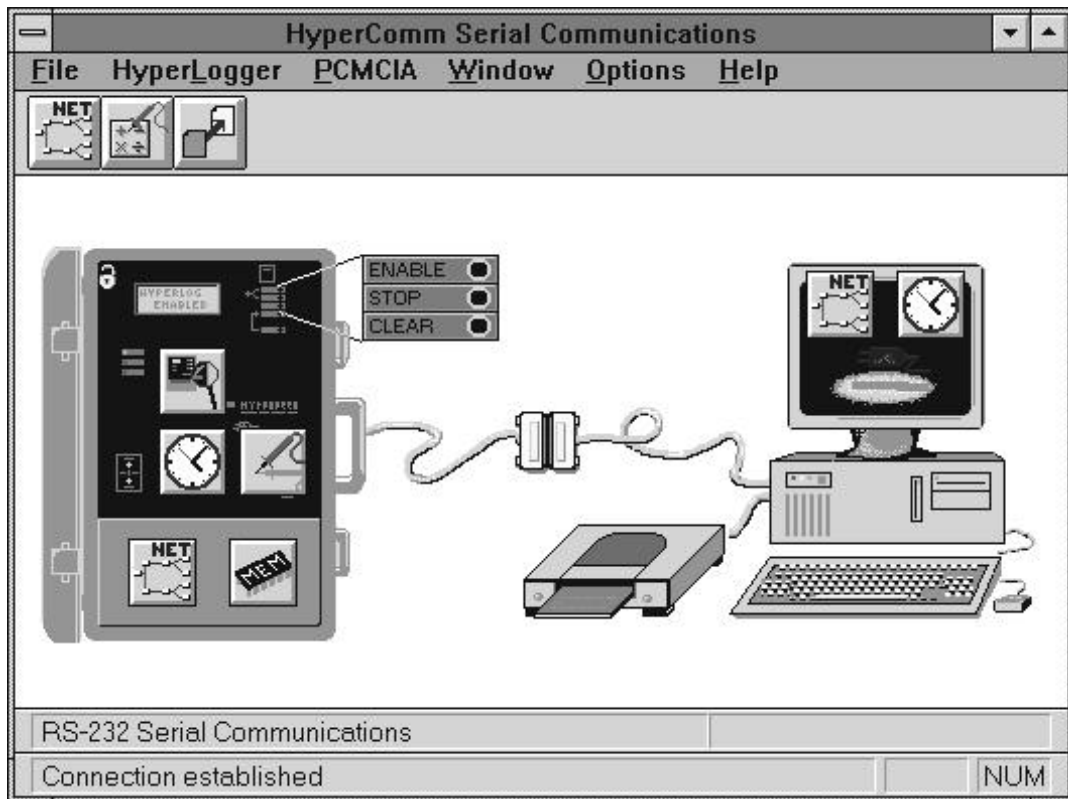


Figure 5... -4: HyperComm serial communication window (connection established)

### **Communication Techniques**

Visual communication has been designed into the HyperComm Window allowing for intuitive mouse driven communication. Two methods are used for communicating commands between the PC and the HyperLogger:

**Drag and Drop of Icons:** Icons representing various types of information are overlayed on the PC and HyperLogger graphics. By dragging and dropping these icons between the PC and the HyperLogger, data communication is implemented.

For example, to set the HyperLogger Clock to the current PC time, merely click and hold on the Clock Icon overlaying the PC, drag it over the the HyperLogger and release it. A confirmation dialog will display to insure your actions.

**Double-Clicking Icons:** Immediate commands can be executed by double-clicking on many of the icons. For example, to Enable the HyperLogger, position the cursor over the Enable Button and double-click and a confirmation dialog will display to insure your actions.

*TIP: Some of the icons can be double-clicked on as a short-cut command. For example, double-clicking on the Clock Icon overlaying the HyperLogger allows for directly setting the clock via text entry.*

### **Communication Icons and their Functions**

#### **Enable Button Icon**

Double-clicking on this button performs the same function as pressing the Enable button on the front of the HyperLogger. After double-clicking, a dialog will appear to confirm the action. If any error conditions exist (eg the Program Net is incompatible with the hardware) a warning dialog will display and the HyperLogger may not be Enabled. Operational Status can always be confirmed with the Status Query command (below).

If the HyperLogger is Rotary Memory mode, and data has been stored to memory, the memory will have to be cleared before Enabling is allowed.

#### **Stop Button Icon**

Double-clicking on this button performs the same function as pressing the Stop button on the front of the HyperLogger. After double-clicking, a dialog will appear to confirm the action. Operational Status can always be confirmed with the Status Query command (below).

#### **Clear Button Icon (HyperLogger Clear not PCMCIA Clear)**

When the HyperLogger is not Enabled, double-clicking on this button results in a clearing of memory (after confirmation). After double-clicking, a dialog will appear to confirm the action. Memory Status can always be confirmed with the Status Query command (below).

The HyperLogger memory can be cleared while the HyperLogger is Enabled. However, If the HyperLogger is Enabled, only memory containing data that has been downloaded will be cleared. This allows for HyperLogger use in long duration continuous acquisition and download periods without missed data.

#### **Unit Name and ID Query**

Each HyperLogger can be assigned an ID and short Name. The ID and NAME are retained in HyperLogger memory until changed via the following procedure and are not cleared with power down or

Memory Clear commands. Both entries can be displayed on the HyperLogger LCD under the STATUS menu and are also available via a HyperLogger Status Query from the PC (following).

To program the HyperLogger ID and NAME, move the cursor over the LCD on the HyperLogger and double-click. A dialog will open for editing. OK will reprogram the HyperLogger to the new ID and NAME.

### Status Query

At any time, the HyperLogger can be interrogated for its operational Status.

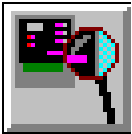


Figure 5...  
-5: Status  
icon



HyperLogger Status	
<b>Unit</b> HL Version: 0.20 Unit Name: HyperLogger Unit ID: HL Unit Time: 03/22/95, 06:17:12 PM	
<div>  OK            Help         </div>	
<b>Net Program (currently loaded)</b> Name: Damper 1A Test Description: Damping response; 22oz shock	
<b>Current Operational State</b> Operational Mode: Idle - Memory Available Remaining Memory: 100% free (0.0 KB used) # Samples Logged: 0 Supply Voltage: 7.6 VDC Backup Lithium Cell: GOOD	
<b>Installed H/W</b> Input Digital/Counter Output 0/5 V (3) Output Relay (2) Output Green LED Input +/-2 VDC/T-C (4)	<b>Active Messages</b>

Figure 5... -6: HyperLogger Status report dialog

Drag and drop the Status Icon from the HyperLogger to the PC and release it. The HyperLogger Status dialog (Figure 5... -6) will open detailing operational information.

Reported information includes:

#### UNIT INFORMATION:

##### ***HYPERLOGGER VERSION:***

Specifies the HyperLogger version number.

##### ***UNIT NAME AND UNIT ID:***

User programmable information for tracking of equipment (see procedure for setting described above).

**UNIT TIME:**

The current date and time on the HyperLogger internal real time clock.

**PROGRAM NET INFORMATION:**

**NAME AND DESCRIPTION:**

Information that has been User programmed in the Global Icon from within HyperNet.

**CURRENT OPERATIONAL STATE:**

**OPERATIONAL MODE:**

Indicates if the unit is Enabled, Stopped, Idle, etc.

**REMAINING MEMORY:**

Specifies the percentage and Kilobytes of data memory still available. When using this number for estimating available logging time consideration must be made for varying sampling rates and data storage formats.

**# OF SAMPLES LOGGED:**

Specifies the number of samples recorded to memory.

**SYSTEM SUPPLY VOLTAGE**

Displays the HyperLogger supply voltage. If internal batteries are installed in the HyperLogger and an external power supply is also connected, the displayed *Supply Voltage* refers to the greater of the two.

*FYI: The displayed Supply Voltage is measured at an internal node on the power supply circuitry. Displayed battery voltage will be the voltage of the internal batteries. External supply voltage will be approximately 1.2 volts higher than indicated.*

**BACKUP LITHIUM CELL:**

The state of charge display for the lithium cell (used for data memory and clock backup) will display *GOOD* or *LOW*. If *LOW* is displayed, download any desired data memory, then replace the lithium cell (See Appendix D).

**INSTALLED H/W (HARDWARE)**

This box lists the standard (eg relays, GPDI, etc) and installed hardware (eg Interface Modules, modems, etc.)

**ACTIVE MESSAGES**

Displays any messages that have been generated due to abnormal operating conditions (such as a power failure) or as a result of a Message Icon being activated from within a Program Net (Chapter 7).

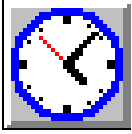


Figure 5...  
-7: Time  
Set icon

### Time Set

The HyperLogger real-time-clock can be set in two different ways.

**Synchronized with PC Time:** By dragging the Clock Icon from the PC to the HyperLogger and releasing, the PC system time is programmed into the HyperLogger.

**Set Absolute Time:** Double-clicking on the Clock Icon overlaying the HyperLogger graphic will display a Time Set dialog. Edit the dialog and select OK to program the HyperLogger clock to the displayed date and time. This method is handy when communicating via modem with HyperLoggers located in different time zones.

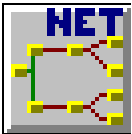


Figure 5...  
-8: Net  
icon

### Program Net Transfer

Refer to Chapter 7 for details on the transfer of Program Net to and from the PCMCIA card.

After the serial link is established, a Net icon will display overlaying both the HyperLogger and the PC in the HyperComm window. The Program Net icon overlaying the HyperLogger represents the Program Net currently loaded into HyperLogger memory. The Program Net overlaying the PC represents the last Program Net edited from within the HyperNet (Chapter 7) development window or the last Program Net downloaded from a serially connected HyperLogger.

Program Nets can be transferred in both directions:

- ◆ Downloaded from the HyperLogger to the PC to review/edit the Program Net currently loaded into HyperLogger memory.
- ◆ Uploaded from the PC to the HyperLogger to reprogram the HyperLogger

At any time, the Program Net currently loaded in the HyperLogger memory can be downloaded to the PC. Click and drag the Program Net Icon overlaying the HyperLogger to the PC and release it. This Program Net can then be edited, saved, and/or uploaded back to the HyperLogger.

To reprogram the HyperLogger with a new Program Net, click and drag the Net Icon overlaying the PC to the HyperLogger and release it. *The Net icon on the PC represents the last Program Net (\*.NET) file edited from within the HyperNet (Chapter 7) window or the last Program Net downloaded from a serially connected HyperLogger.*

If a different Program Net is to be transferred, open the desired Program Net from within HyperNet, then return to the HyperComm window and drag the icon to the HyperLogger.

**NOTE:** If the target HyperLogger memory contains collected data, the User will be prompted to download or clear the data prior to reprogramming. Upon upload of the new Program Net, **data in the HyperLogger memory will be lost.**

**NOTE:** During the upload of a Program Net to the HyperLogger, several integrity tests are performed. One of the tests checks the size of the Program Net to insure that it will fit into the available HyperLogger memory. In the event that the Program Net is too large, reduce the number of icons and retry. Refer to the README file supplied with the HyperWare for an approximate maximum number of icons that can be included in a Program Net for that version of software.



Figure 5...  
-9:  
Memory  
icon

### Data Download

Refer to Chapter 6 for details on the Download of Data from the PCMCIA card.

To transfer data from the HyperLogger memory to a file on the PC disk, click and drag the Memory icon overlaying the HyperLogger to the PC and release it. After a prompt dialog, the data will be downloaded. Upon completion of the serial data transfer, a filename will be requested by a pop-up dialog.

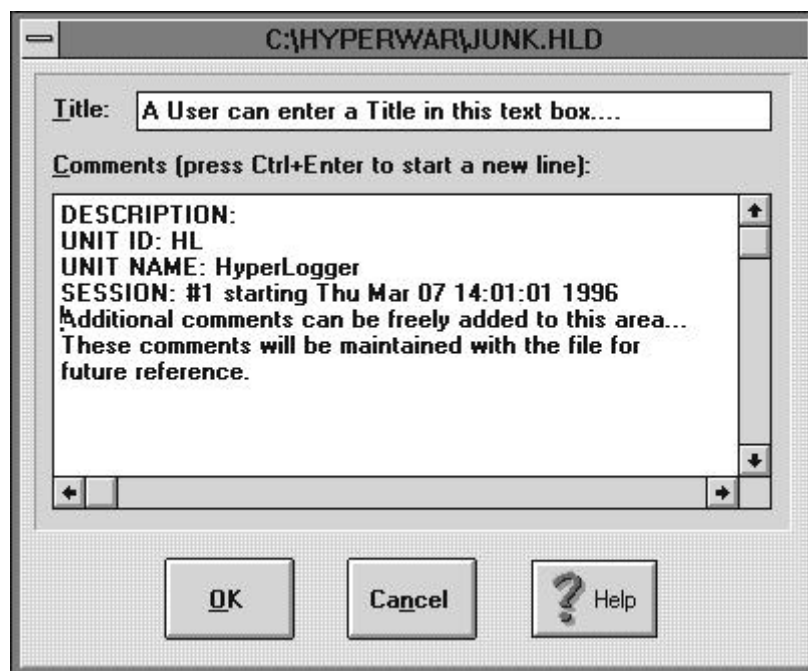


Figure 5... -10: File Information comments entry dialog

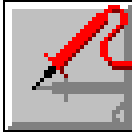
After entry of the filename, a dialog will display for the User to enter additional File Information to be stored with the file (Figure 5... -10). This information includes a short single line Title as well as room for extensive comments. The File Information can be accessed at a later time from within the Post-Processing window and HyperPlot. Upon closing of this dialog, the Download file will then be processed and stored to disk as an ascii file with the extension \*.HLD.

Data downloads can be performed while the HyperLogger is Enabled and executing a Program Net that uses either of the Log to Full modes (see the Global Icon in Appendix A). If the HyperLogger is in

the Rotary Memory mode, the unit must be Stopped before data can be downloaded.

### ***Probe Point Query***

During the construction of a Program Net within HyperNet™, the User can opt to connect Probe Point icons to various nodes throughout the net. These Probe Point icons allow the User to view the current values on the nodes to which they are connected. One of the ways that the Probe Point values can be viewed is by clicking and dragging the Probe Point icon overlaying the HyperLogger to the PC and releasing it. The *last updated value at the Probe Point node* is then displayed on the PC. Optionally, by clicking on the *Resample Periodically* check box, readings will be communicated to the display dialog as the node is updated.



**Figure 5...  
-11: Probe  
Point icon**

***FYI:*** *Probe Point is used for the icon name as connecting these icons to a node on a Net is somewhat analogous to putting a test meter probe on the Net nodes and reading a value.*

If a Program Net that contains Probe Point icons is currently loaded into PC memory, then a Probe Point icon will display overlaying the PC.

### ***Password***

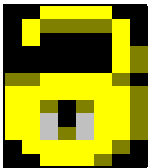
The logger contains a multi-level password system that can be used to foil unauthorized access via telephone modem or RS-232 connection. The logger password system allows for five passwords, a Master and four User passwords.

#### **MASTER PASSWORD**

The Master password allows access to all logger functions, including the ability to manage the User passwords. To enable or change the Master password, double-click on the Password icon (small lock graphic) in the upper left corner of the logger graphic in the HyperComm Window . A dialog will appear which allows the Master password to be changed, and the User passwords to be configured.

#### **USER PASSWORDS**

Up to four User passwords can be set. These passwords allow for specific control of access to individual logger functions. Access to the User password configuration dialog requires the Master password. To configure User passwords, double-click on the Password icon, enter the Master password, and click on the Configure button. A dialog will open allowing the User passwords to be configured. Enter user passwords in the four text boxes at the top of the dialog. Specific logger functions can then be checked to allow access to that function for that password.



**Figure 5... -  
12:  
Password  
lock**

**CAUTION**

Keep track of Passwords as they can not be disabled via a serial link without knowing the Master password.

**PASSWORD PROTECTED FUNCTIONS**

Access to the following functions can be granted/denied via

Allowed Functions	VS-38.AW2	12A-45asd0n	4o6j-8VAx	d8GB-22dD
Download Net Program	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Download Data	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Upload Net Program	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stop	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clear Memory	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Get Status	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Set Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitor Probes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Real Time Tracking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Set Unit Name/ID	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For Future Use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For Future Use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For Future Use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OK Cancel Help

Figure 5... -13: Password Configuration Dialog

the User password configuration dialog. A checked box indicates that access is granted to the corresponding function.

- ◆ Download Net Program
- ◆ Download Data
- ◆ Upload Net Program
- ◆ Enable
- ◆ Stop
- ◆ Clear Memory
- ◆ Get Status
- ◆ Set Time
- ◆ Monitor Probes



- ◆ Real Time Tracking
- ◆ Set Unit Name/ID

### **DOWNLOAD NET - A SPECIAL CASE**

In order to Download Data or run a Real Time Tracking session, the Program Net that is running in the logger must also be loaded into HyperWare. Because of this, HyperWare automatically Downloads the Net from the logger prior to executing either function. Since this is required, any time that either the Download Data or Real Time Tracking boxes are checked, the Download Net box is automatically checked.

### **DISABLING PASSWORDS**

To disable the logger Password feature, the Master Password is required. Double-click on the Password (lock) icon, enter the Master password when prompted and select Change Master Password. Click the OK button *without entering any text in the New Password or Confirm text boxes*. This will clear the Master password and allow access to all logger functions without a password.

**NOTES:**