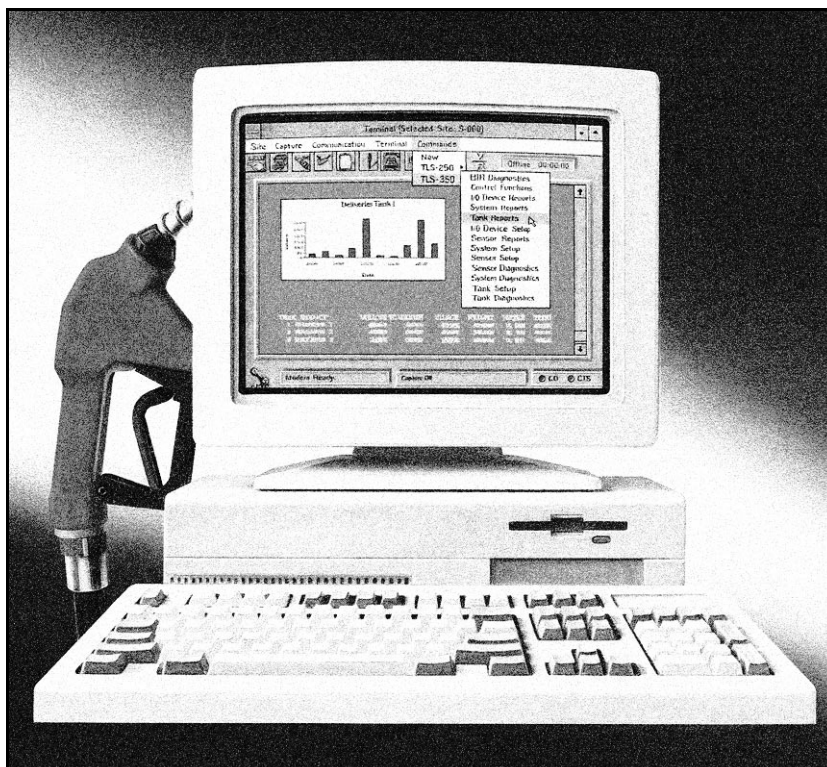


# Remote Control User's Manual

## Version 2.0

Manual Number 577013-531, Revision A



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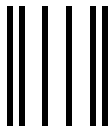
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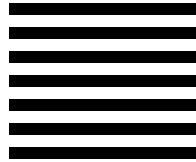
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# Overview

---

Remote Control software is designed to remotely communicate with Veeder-Root's Guardian, TLS-250, TLS-250 Plus!, TLS-300, TLS-350, TLS-350R, and VR-3000 monitoring systems. Remote Control supports all TLS-250 RS-232 commands and all TLS-350 RS-232 commands through Version 12/112.

Remote Control is for PCs using the Microsoft® Windows™ 3.1 or Windows 95® operating systems. You should be familiar with the terms icon, title bar, menu bar, sizing buttons, minimize, maximize, pointer, click, double-click, and drag. You should know how to open a menu, select a command, work with dialog boxes, and other basic Windows activities.

You will need an IBM®-compatible PC and a modem or RS-232 port to run Remote Control. Your PC should have a 33 MHz 486 or faster processor, 8 megabytes of RAM, a 540 megabyte hard drive (a 75 MHz P5 or faster processor, 16 megabytes of RAM, and a 1.2 gigabyte hard drive is recommended for multisite polling), RS-232 port or internal/external modem, MS-DOS® 5.0 or later, and Microsoft Windows 3.1.

You do not need extensive database skills to utilize the data stored by Remote Control. Special training will not be necessary to operate this program. On-line help and this manual will provide all the support needed.

Section 8 of this manual discusses hardware needed to connect your PC to a site [see Table 8-1]. You can jump directly to this section if you would prefer to review this information before installing Remote Control in your PC.

## General

---

Remote Control is a Windows-based application developed by Veeder-Root that sends commands to remote sites, collects data from these sites, and stores this data in tables which you can easily access, modify, and print.

The application was developed in Microsoft Visual Basic® 4.0 Professional Edition. The database format, dBASE III®, was chosen due to its widespread support by numerous spreadsheet, database, and other diverse applications.

Remote Control has three functional modes, Operations, Terminal, and Polling.

### **Operations Mode**

In the Operations Mode the user:

- ☐ Enters the modem/port settings.
- ☐ Creates/modifies site information.
- ☐ Defines Poll Types and assigns them to sites.

- ☐ Manually polls sites to download site data.
- ☐ Downloads or uploads a site's setup.
- ☐ Views all of the poll generated database tables and generates reports from these tables to display and/or print.
- ☐ Pauses and resumes scheduled polls or polls in progress.

#### Terminal Mode

In the Terminal Mode the user:

- ☐ Connects directly with a site, sends commands to a site, and views the site's response on screen.
- ☐ Copies screen data to a PC text file.
- ☐ Causes scheduled polls to wait in the Polling Queue.

#### Polling Mode - Automatic

In the automatic Polling Mode, Remote Control:

- ☐ Connects to sites to download data using previously defined Poll Types (Polling data is automatically written into the several database tables).

## Getting Started

### Installing Remote Control

The Remote Control software installation set consists of 4 diskettes.

#### Procedure

After closing all applications on your PC, follow the steps below to install the Remote Control software:

1. Insert Remote Control diskette #1 into your floppy disk drive.
2. Select **Run** from the File menu in the Windows program manager. The Run dialog box appears.
3. Click on **Browse...** in the Run dialog box. The Browse dialog box appears.
4. Select the appropriate drive, a: or b:, to view the contents of Remote Control diskette #1.
5. Select **Setup.exe** and then click OK. You are returned to the Run dialog box. click on OK.
6. The software will now prompt you to insert diskettes and enter in information. Follow the directions on the screen. When complete, remove the final diskette from the drive. The software will return you to the Program Manager and you can minimize, size and move the Remote Control Group Window as you wish [Figure 1-1].

7. If you have a previous version of Remote Control perform the upgrade procedure next, otherwise go to “Starting The Application” on page 1-5

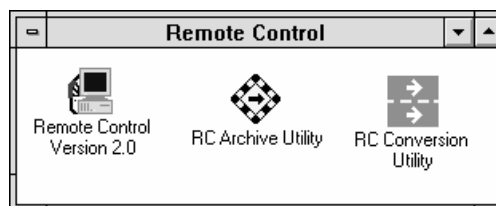


Figure 1-1. Remote Control Group Window

## Upgrading from an Older Version of Remote Control

The Remote Control Conversion Utility allows you to upgrade from an older Remote Control version (103b and previous) to Remote Control version 2.0. You should perform this upgrade before opening Remote Control version 2.0.

1. To open RC Conversion Utility double click on its icon in the Remote Control group window [Figure 1-2].

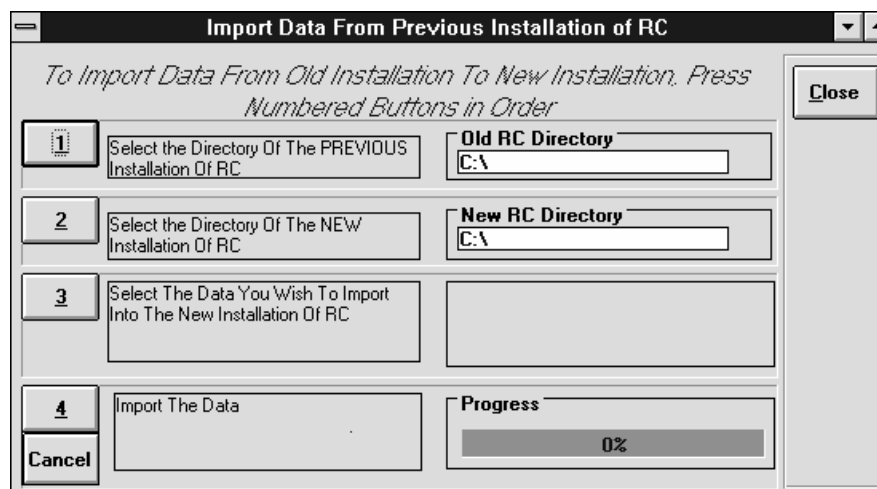
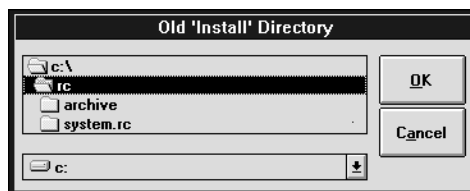


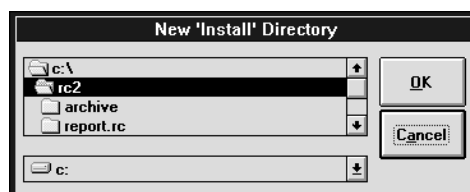
Figure 1-2. RC Conversion Utility Dialog Box

- Click on the **1** button and the **Old “Install” Directory** dialog box appears [Figure 1-3].



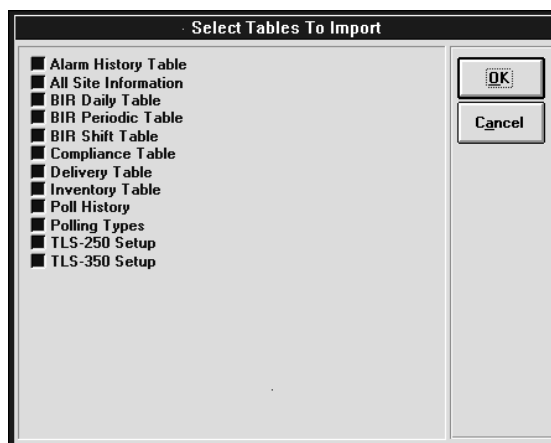
**Figure 1-3. Old “Install” Directory Dialog Box**

- Click on the drive and then the directory containing the old version Remote Control.
- Click on the **OK** button, and you return to the **RC Conversion Utility** dialog box.
- Click on the **2** button and the **New “Install” Directory** dialog box appears [Figure 1-4].



**Figure 1-4. New “Install” Directory Dialog Box**

- Click on the drive and then the directory containing the just installed Remote Control version 2.0.
- Click on the **OK** button, and you return to the **RC Conversion Utility** dialog box.
- Click on the **3** button and the **Select Tables To Import** dialog box appears [Figure 1-5]



**Figure 1-5. Select Tables To Import Dialog Box**

9. Click on the tables you want to upgrade into Remote Control version 2.0 (the selection **All Site Information** refers to data stored in the Site\_Par and Outline tables, NOT all of the table selections in this dialog box). Click on the **OK** button and you return to the **RC Conversion Utility** dialog box.
10. Click on the **4** button and the selected files are converted to Remote Control Version 2.0 database tables.
11. When the conversion process has finished, click on the **Close** button to exit the program. You can now start Remote Control.
12. If while converting files you decide to abort the conversion process, click on the **Cancel** button. Click on the **Close** button to exit the program.

## Starting The Application

The following procedure describes the start up sequence that occurs the first time the Remote Control software is run. Subsequent start-ups take you right to the Main Screen.

1. Activate the Remote Control Group Window and double click on the **Remote Control** icon. The Remote Control application will run.
2. The Port Setup Dialog box will appear [Figure 1-6].

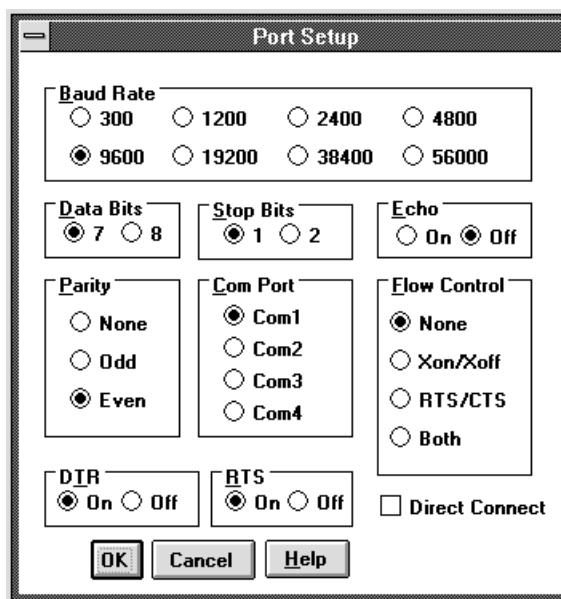


Figure 1-6. Port Setup Dialog box.

3. Click on the option buttons to set your computer's configuration. When you are finished click on the **OK** command button. The **Modem Settings** dialog box will appear [Figure 1-7].

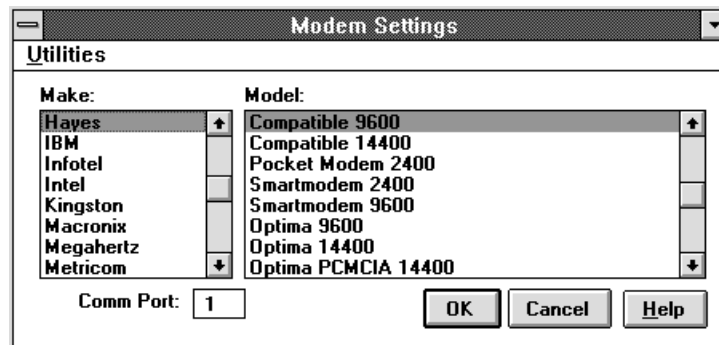


Figure 1-7. Modem Settings Dialog Box

4. Select the make and model of your modem, verify that the Comm Port setting is correct (if it is not, click in its text entry box and type in the correct number), then click on the **OK** command button. The **Terminal Settings** Dialog box will appear [Figure 1-8].

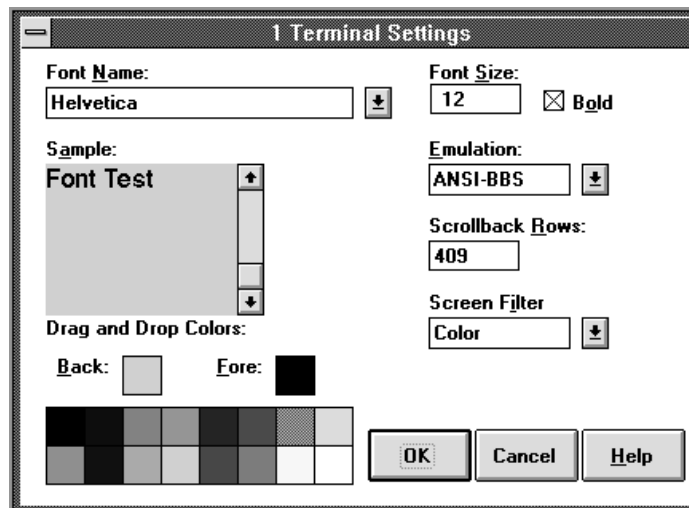


Figure 1-8. Terminal Settings Dialog Box

5. You can change the display settings that will be used when you are in Remote Control's Terminal Mode. The **Sample:** box will show the changes you are making as you do them. If you are satisfied with your changes click on the **OK** command button. If you are not satisfied with your changes, click on the **Cancel** command button to save the default settings (the Terminal Settings dialog box is

discussed further in “Changing the Terminal Screen Display Settings” paragraph in Sect. 6). The Remote Control Main Screen will appear [Figure 1-9].



Figure 1-9. Remote Control Main Screen

6. You are now ready to setup a site.

## Stopping The Program

You can click on the minimize button on the Main Screen so Remote Control will take up less space on your computer screen while it is running.

If you choose to exit Remote Control it quits the program and it will not poll as scheduled. You must leave the Remote Control program running for polling to occur.

While you can pause automatic polling activities to work in Terminal Mode or to use your PC for another task, this practice is not recommended, as the performance of both Remote Control and the second program you are running may be compromised. However, when Remote Control is polling you can NOT use another program that requires your modem since Remote Control is already using the modem.

To quit Remote Control, select **Exit** from the **Site** menu on the Main Screen.





# Setting Up A Site

---

You must set up each site to which Remote Control will connect. During the site setup process you assign a name, I.D., and other important site information.

## Setting Up a New Site

---

Site setup consists of entering the site I.D., site name, phone number, communications settings (baud rate, parity, data bits, and stop bits), and system type (TLS-350, TLS-250).

1. Select **Setup** from the Main Screen.
2. Select **Site** and then **General** from the **Setup** menu. The **Configure Sites** dialog box appears [Figure 2-1]. Note that you can click on the **Cancel** button at any time to exit the **Configure Sites** dialog box without saving any entries.

The screenshot shows a 'Configure Sites' dialog box with the following fields and controls:

- Site ID**: Text input field.
- Site Name**: Text input field.
- Prefix**: Text input field.
- Phone Number**: Text input field.
- Suffix**: Text input field.
- Security Code**: Text input field.
- System Type**: Dropdown menu showing 'TLS-350'.
- Baud Rate**: Text input field showing '2400'.
- Parity**: Radio buttons for 'None', 'Even', and 'Odd' (selected).
- Databits**: Radio buttons for '7' (selected) and '8'.
- Stopbits**: Radio buttons for '1' (selected) and '2'.
- Buttons**: 'Cancel', 'Done', and 'Help' buttons on the right side.

**Figure 2-1. Configure Sites Dialog Box (General Site)**

3. Type in an alpha-numeric **Site ID**. You must select a unique Site ID for each site.
4. Type in a **Site Name**.
5. Type in a **Prefix** if your phone system requires one (e.g., **9**). You can also enter a calling card number. You can enter up to 80 characters in this box. This step is not required for an RS-232 direct connect system.
6. Type in a **Phone Number** for the site's modem. You can enter up to 80 characters in this box.
7. Type in a telephone **Suffix** if required. Remote Control will dial this field after the modem is connected. You can enter up to 80 characters in this box.
8. Type in the **Security Code** if the site's console requires one. Leave this field blank if the systems security code reads all zeros.
9. Select the **System Type** TLS-350 (for Guardian, TLS-300s, and TLS-350s), or TLS-250 system.

10. Select the maximum **Baud Rate** for the site's modem.
11. Click on the appropriate radio button for **Parity**, **Stopbits**, and **Databits** (for the site's modem).
1. When you are satisfied with all the fields, click on the **Done** command button.  
Your site's general setup is now complete and the site will appear in the **Site Not In Groups** section of the **Site Directory** Dialog Box [Figure 2-2].

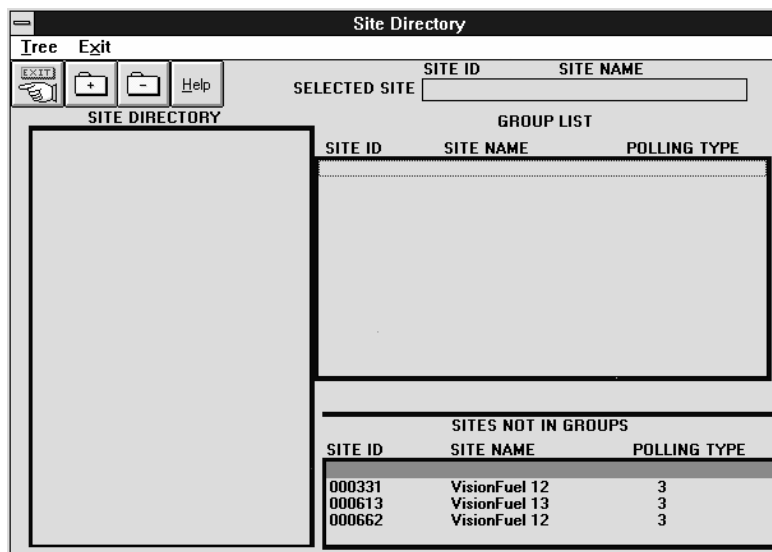


Figure 2-2. Site Directory Dialog Box

## Editing a Site's Setup

To edit a site's setup you must select the site first. You can select a site from the Main Screen or in Terminal Mode (Discussed in Section 6).

1. Go to the **Site** menu from the Main Screen and click on **Select Site**. The **Site Directory** dialog box appears [Figure 2-2]. Highlight the desired site by clicking on it.
2. Click on the **EXIT** command button. You will return to the main menu with the selected site active. The active site's ID will appear in the Main Screen title bar after **Selected Site:** (site ID).
3. Select **Site** and then **General** from the **Setup** menu. The **Configure Sites** dialog box appears [Figure 2-3].

NOTE: when editing an existing site setup there is no cancel button so that when you click on **Done**, all edits are saved. Be careful to double check your edits (a WARNING dialog box will appear if you do not have an entry in the **Site ID** or **Site Name** fields; however, the responsibility still rests with you as to the acceptability of your edits).

- Click on **Done** to save any changes and close the Configure **Sites** dialog box.

**Configure Sites**

<b>Site ID</b> 55446	<b>System Type</b> TLS-350	<b>Parity</b> <input checked="" type="radio"/> None <input type="radio"/> Even <input type="radio"/> Odd
<b>Site Name</b> SelfServ 11	<b>Baud Rate</b> 2400	
<b>Prefix</b> 9.	<b>Databits</b> <input checked="" type="radio"/> 7 <input type="radio"/> 8	<b>Stopbits</b> <input checked="" type="radio"/> 1 <input type="radio"/> 2
<b>Phone Number</b> 860-526-3266		
<b>Suffix</b> 		
<b>Security Code</b> 		
		<b>Done</b> <b>Help</b>

Figure 2-3. Configure Sites Dialog Box



# Organizing Your Sites

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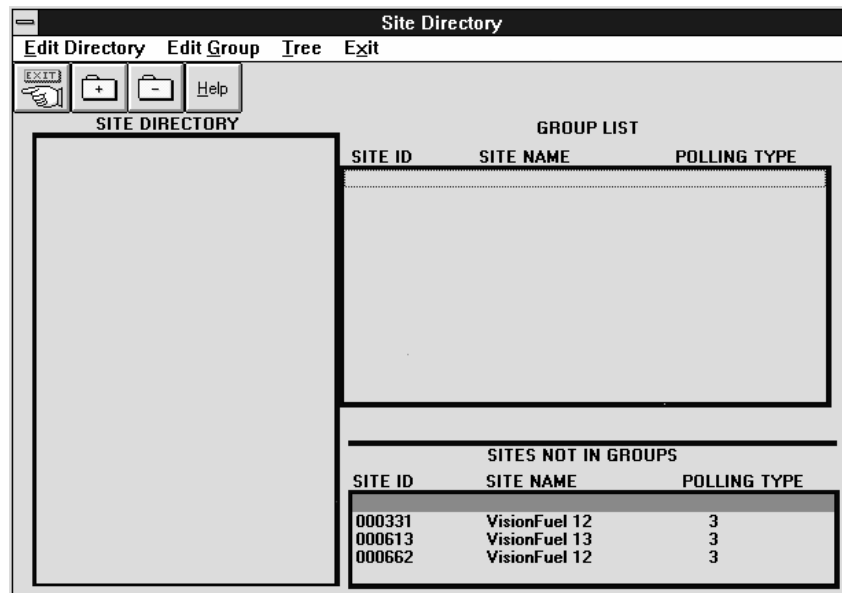
## Creating Folders and Groups

---

You can organize sites by geographic location, by the type of site, or by some other method. To organize your sites, you create groups in which to place the sites and folders in which to place the groups. The structure is very similar to the directory structure in the Windows File Manager.

### Creating Folders and a Directory Tree

1. Click on **Site** from the **Setup** menu on the Main Screen and select **Groups**. The Site Directory dialog box appears [Figure 3-1].



**Figure 3-1. Site Directory dialog box**

2. Select **Add Folder** from the **Edit Directory** menu. The **Add New Folder** dialog box appears [Figure 3-2].



Figure 3-2. Add New Folder dialog box

3. Enter a name for the folder in the text box and then click on the **OK** command button. This will be the name of the “root folder.” The folder will appear in the site directory list [Figure 3-3].

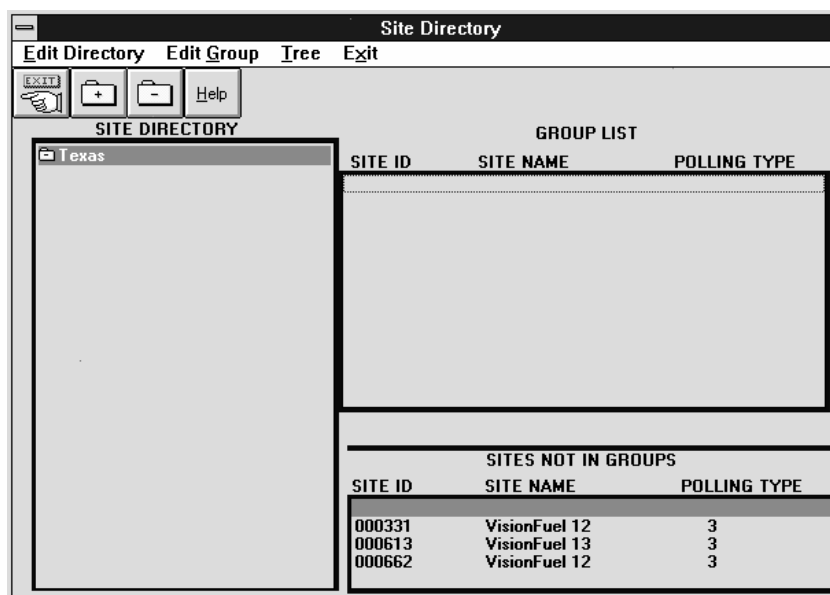


Figure 3-3. Site Directory List with new folder

4. Highlight the “root folder” and select **Add Folder** from the **Edit Directory** menu. The **Add New Folder** dialog box appears.
5. Enter a name for the folder in the text box and then click on the **OK** command button. This will be the name of a “subdirectory folder.” The folder will appear in the site directory list. You can now repeat this step to add more folders to the directory tree [Figure 3-4].

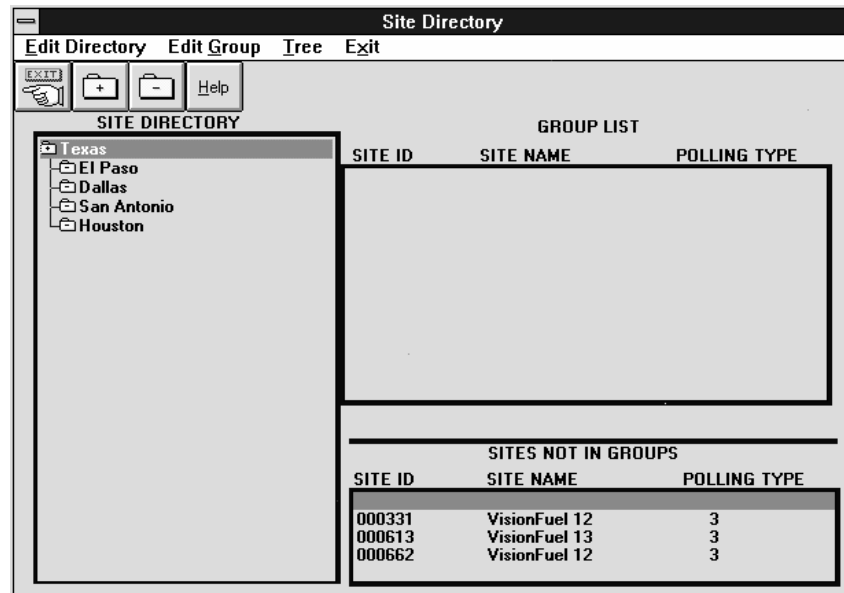


Figure 3-4. Directory Tree displayed in the Site Directory List

## Creating Groups

Groups can ONLY be added to a folder. Later, sites will be added to the groups. Use the following procedure to create a group:

1. If you have the Site Directory dialog box open, proceed to Step 2. If you are at the Main Screen, click on **Site** from the **Setup** menu on the Main Screen and select **Groups**. The Site Directory dialog box appears.
2. Highlight the folder that you want to add a group to.
3. Select **Add Group** from the **Edit Directory** menu. The **Add New Group** dialog box appears [Figure 3-5].



Figure 3-5. Add New Group Dialog Box

4. Enter a name for the group in the text box then click on the **OK** command button. The group will be added to the highlighted folder and displayed in the Site Directory list [Figure 3-6].
5. You may now add more groups to the directory tree by repeating Steps 2- 4. Figure 3-6 illustrates a directory tree with two groups in the selected directory path.

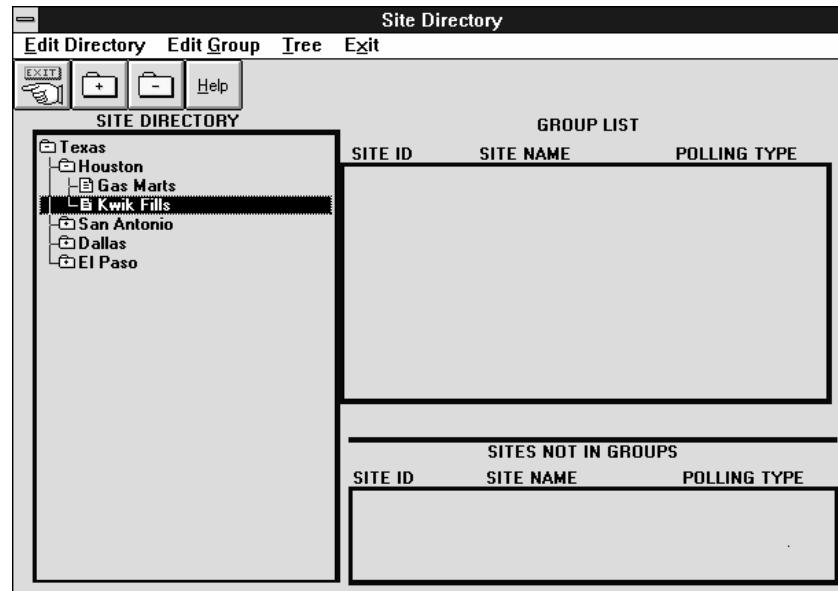


Figure 3-6. Two Groups in a Folder

## Adding a Site to a Group

Once you have created groups you can assign sites to them. We will again use the geographical example to illustrate adding a site to a group. Use the following procedure to create a group:

1. If you have the Site Directory dialog box open, proceed to Step 2. If you are at the Main Screen, click on **Site** from the **Setup** menu on the Main Screen and select **Groups**. The Site Directory dialog box appears.
2. Highlight the group that you want to add the desired site to. The desired site must be listed in the **SITES NOT IN GROUPS** list. A site can only be assigned to one group.



- Highlight the desired site. Both the desired site and the target group should now be highlighted [Figure 3-7].

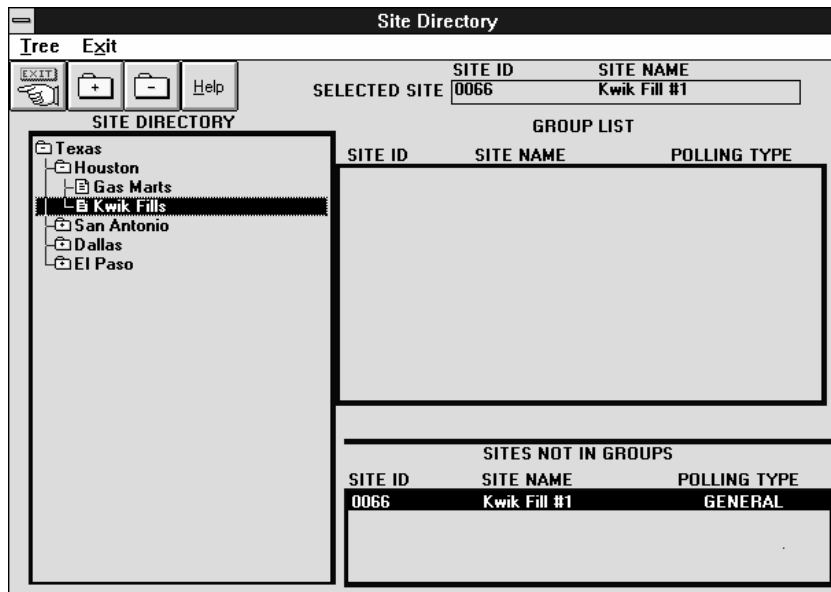


Figure 3-7. Adding a Site to a Group

- Select **Add To Group** from the **Edit Group** menu. The site appears in the group list [Figure 3-8]. You can repeat this procedure to add more sites to the group.

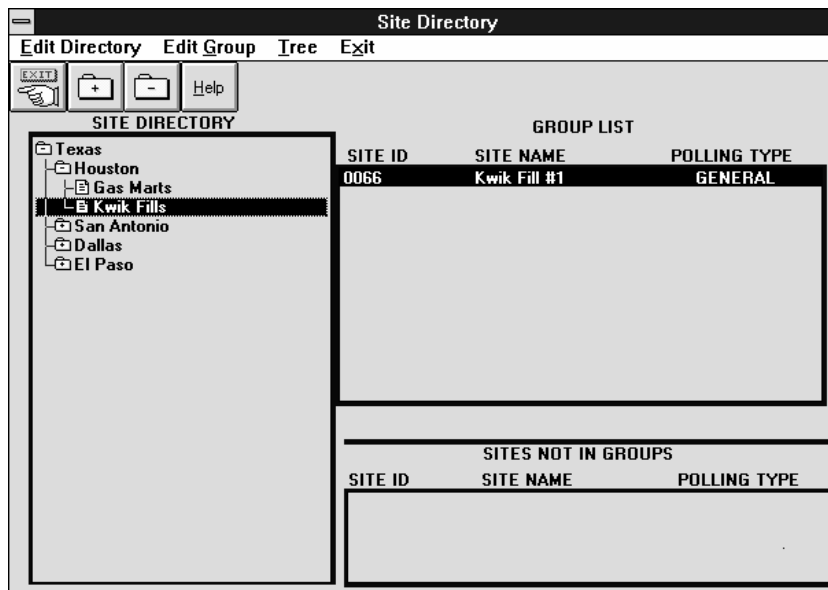


Figure 3-8. Site Added to a Group

## Removing Sites, Groups and Folders

---

### Removing a Site from a Group

You can remove a site from a group. Use the following procedure to remove a site from a group:

1. If you have the **Site Directory** dialog box open, proceed to Step 2. If you are at the Main Screen, click on **Site** from the **Setup** menu on the Main Screen and select **Groups**. The **Site Directory** dialog box appears.
2. Click on the folder that contains the site to remove. The sites assigned to that group will appear in the **Group List** window. Highlight the site you wish to remove from the group.
3. Select **Remove From Group** from the **Edit Group** menu. The site is deleted from the group and appears in the **SITES NOT IN GROUPS** list. You can now leave the site unassigned or assign it to another group.

### Removing a Group from a Folder

You can remove a group from a folder. All the sites assigned to this group will then appear in the **SITES NOT IN GROUPS** list. Use the following procedure to remove a group from a folder:

1. If you have the **Site Directory** dialog box open, proceed to Step 2. If you are at the Main Screen, click on **Site** from the **Setup** menu on the Main Screen and select **Groups**. The **Site Directory** dialog box appears.
2. Click on the folder that contains the group to delete or expand the tree.
3. Highlight the group to delete then select **Delete Group** from the **Edit Directory** menu. The group will be deleted and any sites assigned to it will appear in the **SITES NOT IN GROUPS** list.

### Removing a Folder from the Tree

You can remove a folder from the directory tree. You cannot delete a folder that contains a subgroup (either another folder or a group). Use the following procedure to remove a folder:

1. If you have the **Site Directory** dialog box open, proceed to Step 2. If you are at the Main Screen, click on **Site** from the **Setup** menu on the Main Screen and select **Groups**. The **Site Directory** dialog box appears.
2. Click on the folder you want to delete. Delete any folders or groups in that folder.
3. Highlight the folder to you want to delete then select **Delete Folder** from the **Edit Directory** menu. If the folder contains a folder or group the **Warning** dialog box will appear [Figure 3-9], otherwise the folder will be deleted.



Figure 3-9. SubGroup Warning dialog box

## Viewing the Directory Tree

You can expand the directory tree in the **SITE DIRECTORY** list to view both the folders and the groups, or you can collapse the tree to view the folders only. You can use either the command buttons [Figure 3-10] or the menu list to expand and collapse the list. The Site Directory command buttons are described below.



Figure 3-10. Site Directory Window Command Buttons



**Exit command button.** Clicking on this button performs the same function as selecting **Exit** from the menu bar – you exit the **Site Directory** dialog box and return to the Main Screen.



**Expand Tree command button.** Clicking on this button performs the same function as selecting **Expand** from **Tree** on the menu bar – you expand the directory tree in the Site Directory list and display all the folders and groups.



**Collapse Tree command button.** Clicking on this button performs the same function as selecting **Collapse** from **Tree** on the menu bar – you collapse the directory tree in the Site Directory list and display only folders.

## Expanding the Tree

To expand the tree and view all the folders and groups:

1. If you have the **Site Directory** dialog box open, proceed to Step 2. If you are at the Main Screen, click on **Site** from the **Setup** menu on the Main Screen and select **Groups**. The **Site Directory** dialog box appears.

- Click on the Expand Tree command button or select **Expand** from the **Tree** menu to expand the tree and view all the folders and groups [Figure 3-11].

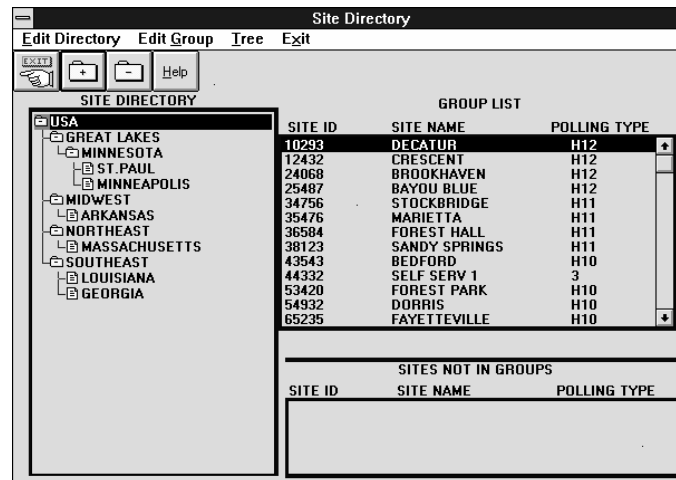


Figure 3-11. Expanded Tree

## Collapsing the Tree

- If you have the **Site Directory** dialog box open, proceed to Step 2. If you are at the Main Screen, click on **Site** from the **Setup** menu on the Main Screen and select **Groups**. The **Site Directory** dialog box appears.
- Click on the Collapse Tree command button or select **Collapse** from the **Tree** menu to expand the tree and view only the folders [Figure 3-12].

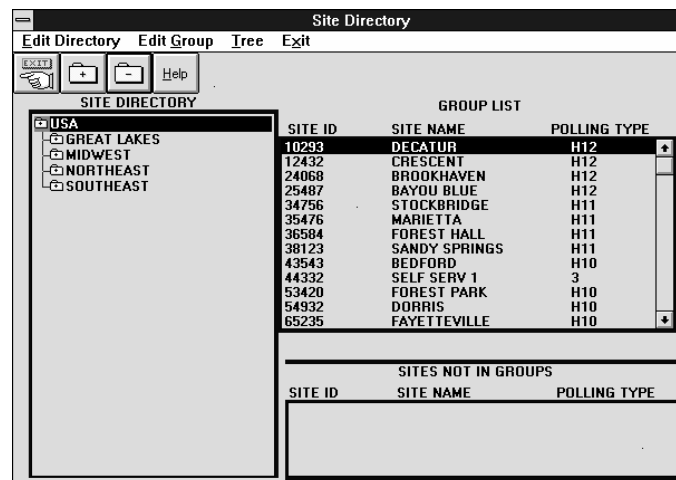


Figure 3-12. Collapsed Tree

# Polling

---

Polling can be performed either automatically or manually. When polling is done automatically, Remote Control connects to a site at a time you selected, collects the data you requested, writes that data into the appropriate dBASE III tables, and records the poll in the Poll History table. When you perform a manual poll, Remote Control automatically writes the poll data into the appropriate dBASE III tables, but does not record the poll in the Poll History table.

Remote Control's database tables are:

- ☐ ALM\_HIST.DBF - Alarm History
- ☐ COMPLY.DBF - Compliance Data
- ☐ DELIVERY.DBF - Delivery History
- ☐ INVNTORY.DBF - Inventory Data
- ☐ POLLHIST.DBF - Automatic Poll History
- ☐ POWEROUT.DBF - Power Outage History
- ☐ BIR\_DALY.DBF - Daily BIR Data
- ☐ BIR\_PER.DBF - Periodic BIR Data
- ☐ BIR\_SHFT.DBF - Shift BIR Data

Database tables are saved with a “.dbf” file extension and can be read by most database programs. Within Remote Control, you can view this data in spreadsheet form and print the reports using the Remote Control report format. Section 10 describes contents of each of these tables.

## Poll Types

---

Remote Control can only poll a site if that site has been assigned to a Poll Type. A poll type tells Remote Control what data it is to retrieve from a site and how often. You name and define poll types. Once you define a poll type you can then assign a site or a group of sites to it.

### Setting Up a New Poll Type

1. Select **Polling Types** from the **Setup** menu on the Main Screen. The **Setup Poll Types** dialog box appears [Figure 4-1].

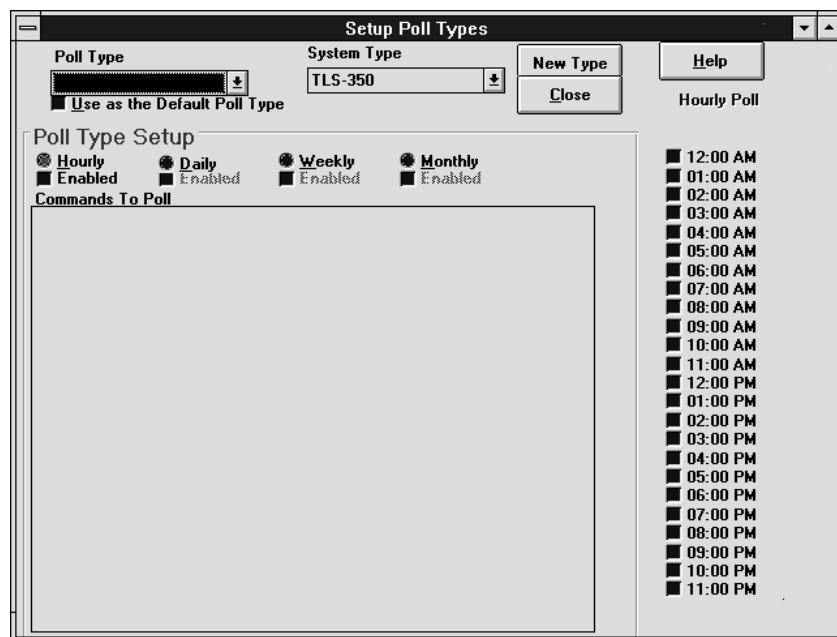


Figure 4-1. Setup Poll Type dialog box

2. Choose a system type: **TLS-250** for TLS-250 Consoles, **TLS-350** for Guardian, TLS-300s, TLS-350, and TLS-350R consoles, or **VR-3000** for VR-3000 Consoles. You can also select a second, or third system type for this same poll type [see “Setting Up One Poll Type for Multiple System Types and/or Frequencies” below].
3. Since this is first poll type entered, click on the **New Type** command button. The **Add Poll Type** dialog box appears [Figure 4-2].
4. Enter a name for this poll type in the text box and then click on the **OK** command button. The new poll type name will appear in the **Poll Type** drop-down list.

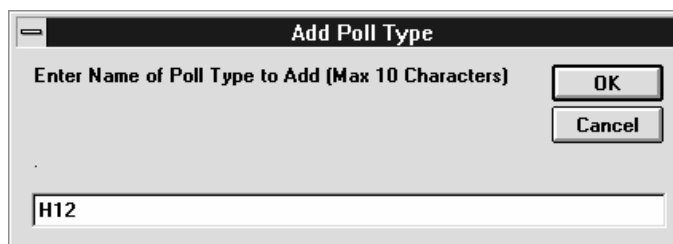


Figure 4-2. Add Poll Type dialog box

5. The Setup Poll Dialog Box now displays the new poll type name in the Poll Type window and lists the Commands To Poll for the selected system type (in the example below TLS-350) [Figure 4-3].

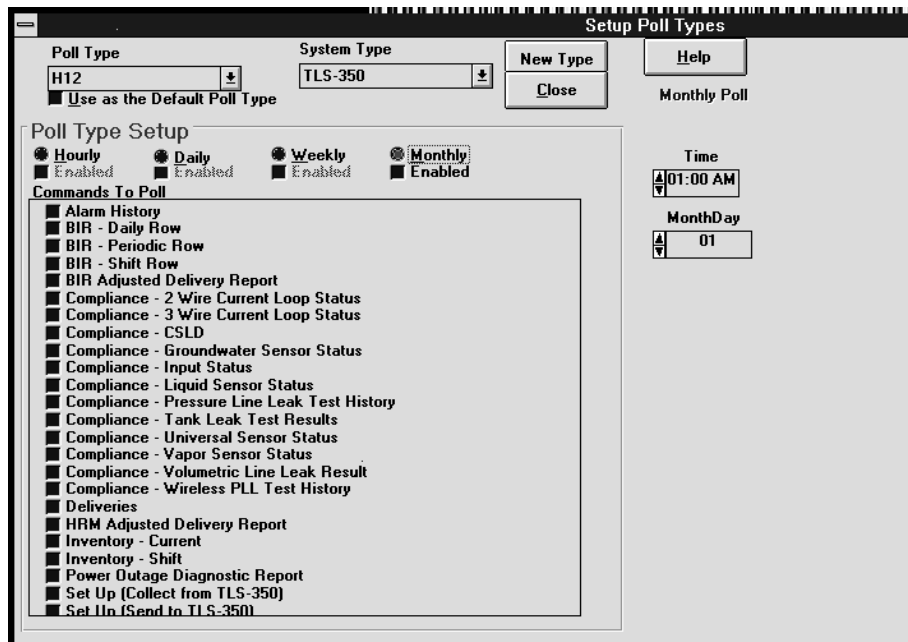


Figure 4-3. Setup Poll Types with New Poll Type Displayed

6. In the **Poll Type Setup** section select a poll frequency of Monthly, Weekly, Daily, or Hourly as described in the following subsections. You can also select multiple frequencies for this same poll type [see “Setting Up One Poll Type for Multiple System Types and/or Frequencies” below].

### Monthly Poll

A monthly poll type will poll all the sites assigned to it every month on the calendar date and time you select. All sites assigned to this poll type will be polled every month on the selected day and time. Use the following procedure to setup a monthly poll:

- ☐ Click on the **Monthly** option button.
- ☐ In the **Commands To Poll** list, click on the option buttons of the commands you want to poll monthly.
- ☐ Go to the **Time** text box and use the arrows to set the time of day that you want to poll.
- ☐ Go to the **Month/Day** text box and use the arrows to set the day that you want to poll.

- ☐ If you want the polling to begin (on the selected day), click on the **Enabled** option button.
- ☐ You can now setup another frequency to poll (weekly, daily or hourly) or leave the **Setup Poll Types** dialog box by clicking the **Close** command button. The **Change Settings** dialog box will appear (for either operation) prompting you to accept the changes). If you are done, click on the **Close** command button to return to the Main Screen.

### Weekly Poll

A weekly poll type will poll all the sites assigned to it every week on the specified day and time. Use the following procedure to setup a weekly poll:

- ☐ Click on the **Weekly** option button.
- ☐ In the **Commands to Poll** list, click on the option buttons of the commands you want to poll weekly.
- ☐ Go to the **Time** text box and use the arrows to set the time of day that you want to poll.
- ☐ Go to the **Weekday** text box and use the arrows to set the day that you want to poll.
- ☐ If you want the polling to begin (on the selected day), click on the **Enabled** option button.
- ☐ You can now setup another frequency to poll (monthly, daily or hourly) or leave the **Setup Poll Types** dialog box (by clicking the **Close** command button). The **Change Settings** dialog box will appear (for either operation) prompting you to accept the changes). If you are done, click on the **Close** command button to return to the Main Screen.

### Daily Poll

A daily poll type will poll all the sites assigned to it every day at the specified time. Use the following procedure to setup a daily poll:

- ☐ Click on the **Daily** option button.
- ☐ In the **Commands To Poll** list, click on the option buttons of the commands you want to poll daily.
- ☐ Go to the **Time** text box and use the arrows to set the time of day that you want to poll.
- ☐ If you want the polling to begin (on the selected hour), click on the **Enabled** option button.



- ☐ You can now setup another frequency to poll (monthly, weekly or hourly) or leave the **Setup Poll Types** dialog box (by clicking the **Close** command button). The **Change Settings** dialog box will appear (for either operation) prompting you to accept the changes. If you are done, click on the **Close** command button to return to the Main Screen.

### Hourly Poll

An hourly poll type will poll all the sites assigned to it every day at the times you specify. Use the following procedure to setup a hourly poll:

- ☐ Click on the **Hourly** option button.
- ☐ In the **Commands to Poll** list and click on the option buttons of the commands you want to poll at specific times of day.
- ☐ Go to the **Hourly Poll** hours list and click on the option buttons of the hours that you want to poll.
- ☐ If you want the polling to begin at the next specified hour, click on the **Enabled** option button.
- ☐ You can now setup another frequency to poll (monthly, weekly or daily) or leave the **Setup Poll Types** dialog box (by clicking the **Close** command button). The **Change Settings** dialog box will appear (for either operation) prompting you to accept the changes. If you are done, click on the **Close** command button to return to the Main Screen.

### Making a Poll Type the Default Poll Type

Once you create a Poll Type you can make it the “Default” Poll Type (i.e., the Poll Type all sites are assigned to that are not currently assigned a poll type).

1. Select **Polling Types** from the **Setup** menu on the Main Screen. The **Setup Poll Types** dialog box appears [Figure 4-1].
2. Display the Poll Type you wish to use as the default in the **Poll Type** window.
3. Click on the **Use as the Default Poll Type** box below the **Poll Type** window.
4. The **Change Settings** dialog box will appear prompting you to accept the changes. Click on the **Yes** button, and then on the **Close** button in the **Setup Poll Types** dialog box to return to the Main Screen.

### Setting Up One Poll Type for Multiple System Types and/or Frequencies

You may want to setup one Poll Type to gather data from multiple System Types or at different frequencies, or both. For example; you may want to poll a group of sites that has both TLS-250 and TLS-350 Consoles for compliance data on a monthly basis,

deliveries on a weekly basis, alarms on a daily basis, and inventory at the end of each shift.

1. From the **Setup Poll Types** dialog box, under **System Type** select **TLS-250**.
  2. One by one setup each poll frequency following instructions in the previous four subsections; **Monthly Poll**, **Weekly Poll**, **Daily Poll**, and **Hourly Poll**, with one exception, on the final step of each poll frequency setup do not click on the **Close** command button, just select the next poll frequency and Commands To Poll.
  3. When you finish each poll frequency and its Commands To Poll selections, go to the **System Type** window and select **TLS-350**. Then you continue to setup each poll frequency and Commands To Poll selections for this System Type.
  4. When each of the polling frequency and Commands To Poll selections are set for the second System Type, click on the **Close** command button to save the poll type.
- When Remote Control polls the sites or group you assign to this poll type, it will automatically recognize the System Type, substitute the appropriate commands to poll, and enter the polled data in the requisite database tables.

## Assigning a Site or Group of Sites to a Poll Type

For automatic polling of your site(s) to occur you must assign each site or group of sites to one of the poll types you created. The following procedure is also used to change a site's (or group's) poll type.

1. Go to the Main Screen.
2. Click on **Site** from the **Setup** drop-down list and select **Poll Types**. The **Site Directory** dialog box appears [Figure 4-4].

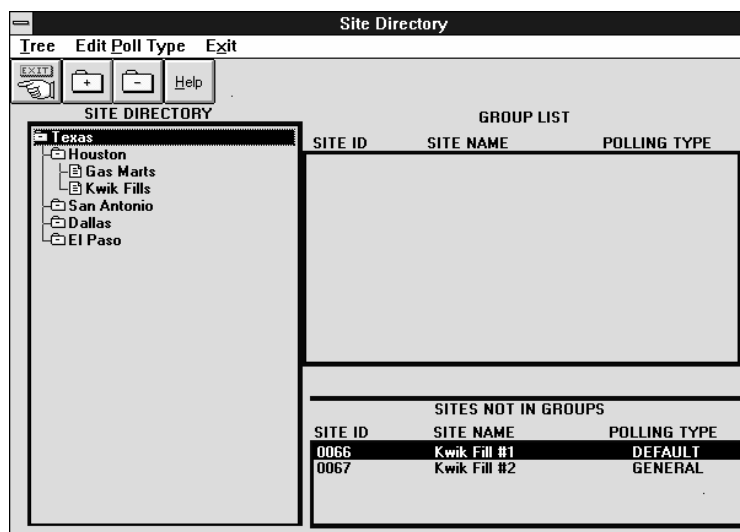


Figure 4-4. Polling Type Site Directory

- Click on the site or group to which you want to assign to a poll type (You can use the Shift key or the Control key to select multiple sites). In the example shown in Figure 4-4, the highlighted site, Kwik Fills #1, is currently assigned to the DEFAULT Polling Type (a new site will always be assigned to the default poll type).
- Select **Edit Poll Type** from the dialog box menu bar. The **Assign Poll Types to Sites** dialog box appears [Figure 4-5].

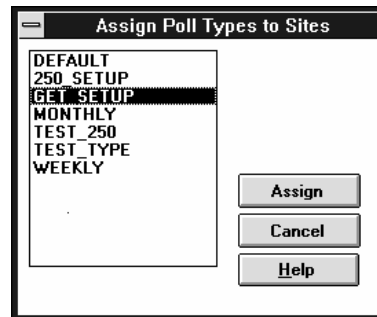


Figure 4-5. Assign Poll Types to Sites Dialog Box

- Highlight the desired poll type then click on the **Assign** command button. The selected Poll type will be assigned to the selected site or group of sites [Figure 4-6].

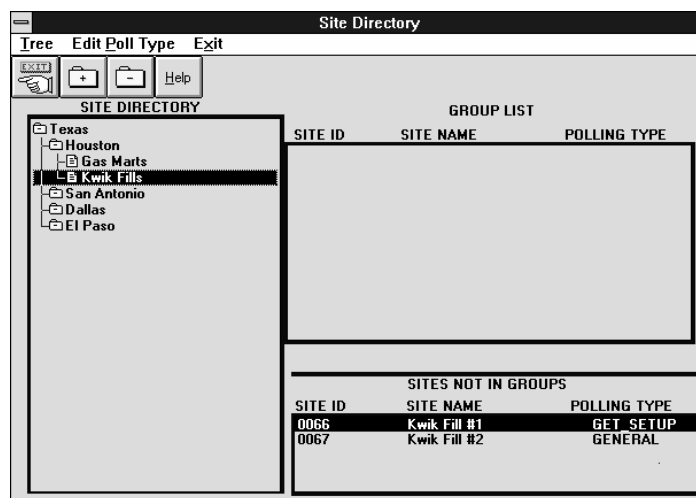


Figure 4-6. Assigning a Poll Type to a Site

## Editing a Poll Type

You can NOT change the name of a Poll Type and can you can NOT delete it. However, you can edit the Poll Type Setup (frequency and Commands To Poll

selections) for an existing poll type and save these changes. These new settings will be applied to all sites assigned to this poll type.

1. Go to the Main Screen.
2. Select **Polling Types** from the **Setup** drop-down list. The **Setup Poll Types** dialog box appears.
3. Select the Poll Type to modify from the **Poll Type** list.
4. Change the **Poll Type Setup** information as desired.
5. When you are finished, click on the **Close** command button. The **Change Settings** dialog box will appear.
6. Click on the **Yes** command button to save the changes to the poll type and you are returned to the Main Screen.

## The Polling Queue

The Polling Queue is automatically filled by Remote Control for each poll with a list of the sites scheduled to be polled. After a site is polled it is automatically removed from the list. When the poll is completed the queue is empty.

### Using The Polling Queue

You may want to view polling queue to see what sites remain to be polled, to remove a site from the queue, or to monitor the poll.

1. Go to the Main Screen and select **Polling**. The Polling menu drops down.
2. Click on **View Polling Queue**. The **Sites To Poll Next** screen appears [Figure 4-7].

SITE ID	SITE NAME	POLL TYPE	TIME	GROUP	REMOTE TYPE	PHONE NUMBER	BAUD RATE	PARITY
10293	DECATUR	H12	11:00	White	TLS-350	314	2400	0
12432	CRESCENT	H12	11:00	Newark	TLS-250	301	2400	0
24068	BROOKHAVEN	H12	11:00	East	TLS-350	301	2400	0
25487	BAYOU BLUE	H12	11:00	Armonk	TLS-350	301	2400	0
34756	STOCKBRIDGE	H12	11:00	Beverton	TLS-350	301	2400	0
35476	MARIETTA	H12	11:00	East	TLS-350	301	2400	0
36584	FOREST HALL	H12	11:00	Newark	TLS-250	301	2400	0
38123	SANDY SPRINGS	H12	11:00	Beverton	TLS-350	301	2400	0
43543	BEDFORD	H12	11:00	Newark	TLS-250	301	2400	0
53420	FOREST PARK	H12	11:00	Armonk	TLS-350	301	2400	0
54932	DORRIS	H12	11:00	White	TLS-250	301	2400	0
65235	FAYETTEVILLE	H12	11:00	Portland	TLS-350	301	2400	0
76143	DORAVILLE	H12	11:00	Portland	TLS-350	301	2400	0
89654	MABLETON	H12	11:00	Portland	TLS-350	301	2400	0
89654	MABLETON	H12	16:00	Portland	TLS-350	301	2400	0
89654	MABLETON	H12	16:00	Portland	TLS-350	301	2400	0
12432	CRESCENT	H12	16:00	Newark	TLS-250	301	2400	0
12432	CRESCENT	H12	16:00	Newark	TLS-250	301	2400	0

Figure 4-7. Sites to Poll Next Screen

The **Sites To Poll Next** screen has five command buttons on the upper left-hand side of the window. You can click on these buttons to execute a command. The following is a description of the command buttons.



**Exit** This command allows you to exit the **Sites To Poll Next** screen and return to the Main Screen.



**Pause** This command halts the poll after polling the site to which it is connected. NOTE: This poll and future polls will NOT resume UNTIL you press the **Resume** button (as designated by your poll types, sites scheduled to be polled in upcoming polls will be added to the polling queue).



**Resume** This command restarts polling (if it was paused). The next site in the polling queue is polled, and the next, until all of the sites in the polling queue have been polled.



**Remove** This command enables you to remove a site from this poll's queue. When you click on this button a dialog box appears prompting you to confirm the removal of the selected site(s) from the queue. NOTE: you can not remove the site at the top of the queue.



**View Poll / Hide Poll** These commands enable you to toggle between viewing or not viewing a description of the current poll in a message box to the right of these buttons. Click on this button to view or not view the poll description.

---

## Pausing a Poll

While you can pause automatic polling activities to work in terminal mode or to use your PC for another task, this practice is not recommended, as the performance of both Remote Control and the second program you are running may be compromised. When Remote Control is polling you can NOT use another program that requires your modem since Remote Control is already using the modem.

### To Pause All Polling Activities

Go to the Main Screen and under **Polling** select **Pause Polling**. You can also pause polling from the Polling Queue (**Sites To Poll Next**) window by clicking on the **Pause** button. In either case, Remote Control will pause all polling activities.

NOTE: This poll and future polls will NOT resume UNTIL you select **Start Polling Now** from the Main Screen **Polling** menu (As designated by your poll types, sites scheduled to be polled in upcoming polls will be added to the polling queue).

### To Resume All Polling Activities

Select **Start Polling Now** under the Main Screen **Polling** menu, or, if you are viewing the polling queue window, click on the **Resume** button.

## Starting A Manual Poll

Once you assign a site to a Poll Type, Remote Control will poll the site automatically. Occasionally you may need to poll a site right away. Remote Control lets you manually poll a site at any time. Note: manual polls are NOT entered in the Poll History Database Table [ref. Section 10, Table 10-5], but the data collected via manual polls will be entered in the appropriate database tables). Use the following steps to start a manual poll:

1. Select the site to be polled.
2. Go to the Main Screen and select **Polling** from the menu bar. Click on **Start Polling Now**. The **Poll Now** dialog box appears [Figure 4-8].
3. In the **Poll Now** dialog box, click on the desired **Commands To Poll** from the list, then click on the **Poll Now** command button (starting the poll). If you are watching the **Poll Now** dialog box you will notice several changes in the screen as the poll takes place. A line under the Abort button begins revolves as the data transfer occurs. During the poll the selected **Commands To Poll** names will turn yellow. Each name will turn green when successfully polled. If one of the selected **Commands To Poll** names turns red the transfer failed and you will have to try that command again.
4. Press the **Abort** button to stop a manual poll.

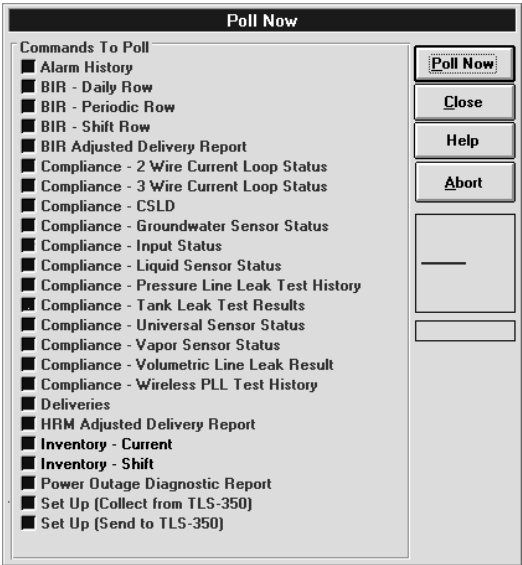


Figure 4-8. Poll Now Dialog Box

## Poll History Operational Database Table

The Poll History Operational Table contains a record of a site’s automatic polls. Manual polls will not be recorded in the Poll History Operational Table [ref. Section 10, Table 10-6].

# Reports

---

Site data is automatically written into Remote Control's several database tables [ref. Section 10] after every poll (the database table chronicling automatic polls [ref. Table 10-5] does not keep a record manual polls, but the data gathered in a manual poll is automatically written into the appropriate database tables). You can view a complete database table or a part of it, up to and including a date you select. You can view a report of a particular database for a single site, all sites in a single group, or all sites. You can also print this report or copy it to a file.

## Viewing the Database Tables

---

There are two ways to access database reports.

- ☐ You can view any of the above reports for a site from the **View** menu of the Main Screen.
- ☐ You can view or print any of the reports for a site, a group of sites, or all sites, with or without archived report data, from the **Report** menu of the Main Screen.

### View Menu

1. Select **View** from the Main Screen [Figure 5-1]. The View menu drops down (notice that the **BIR** selection has a submenu).

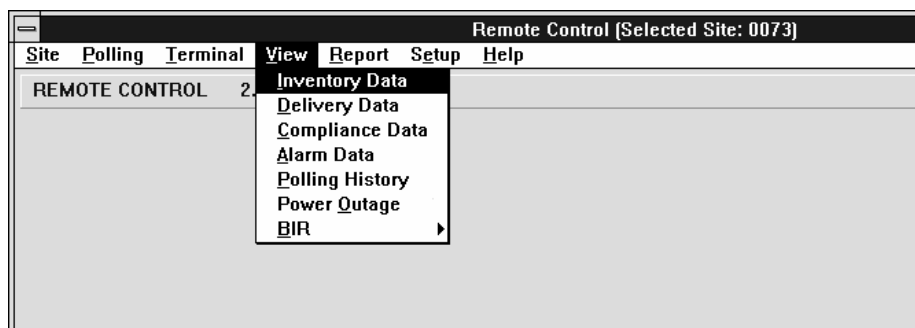


Figure 5-1. View Menu

2. Select the database table you want to view and the report appears [Figure 5-2].

ALM_TYPE	ALM_T_TXT	NUMBER
4	Battery off	0
4	Battery off	0
5	Tank Low Limit Alarm	2
8	Tank Invalid Height Alarm	2
5	Tank Low Limit Alarm	2
9	Tank Probe Out Alarm	2
9	Tank Probe Out Alarm	2
11	Tank Delivery Required Warning	2
11	Tank Delivery Required Warning	2
11	Tank Delivery Required Warning	2
8	Tank Invalid Height Alarm	2
11	Tank Delivery Required Warning	2
11	Tank Delivery Required Warning	1
11	Tank Delivery Required Warning	1
11	Tank Delivery Required Warning	1
11	Tank Delivery Required Warning	1
11	Tank Delivery Required Warning	4
11	Tank Delivery Required Warning	4

Figure 5-2. Inventory Report Data in Database Format

3. You can use the scroll bars to view the data that is not displayed in the window.

### Viewing Data Up To and Including a Specific Date

1. Click on **Choose Date** to view the data collected on a specific date. The **Select Date To View** dialog box appears [Figure 5-3].

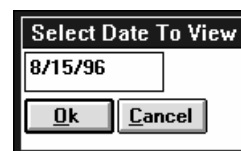


Figure 5-3. Select Date To View Dialog Box

2. Enter the desired date in the date entry field box and then click **Ok**. The database table displays data up to and including the desired date [Figure 5-4].



Alarm History VIEW FOR SITE : 0073		
Close	Copy	Choose Date Help
COMMENTS	DATE	TIME
Priority	1/1/96	8:00
Priority	1/1/96	8:00
Non-Priority	7/24/96	10:44
Priority	7/24/96	10:53
Priority	7/24/96	10:53
Priority	7/24/96	10:46
Priority	7/24/96	10:43
Non-Priority	7/24/96	10:53
Non-Priority	7/24/96	10:43
Non-Priority	7/24/96	19:39
Non-Priority	7/24/96	16:45
Non-Priority	7/24/96	10:54
Non-Priority	7/27/96	11:12
Non-Priority	7/27/96	5:11
Non-Priority	8/6/96	2:41
Non-Priority	8/6/96	2:48
Non-Priority	8/9/96	11:45
Non-Priority	8/9/96	0:34
Non-Priority	8/10/96	5:10
Non-Priority	8/10/96	5:11
Priority	8/12/96	13:51
Priority	8/12/96	13:51
Priority	8/15/96	13:42
Priority	8/15/96	13:35
Priority	8/15/96	13:36

Figure 5-4. Data for Selected Date

### Copying Specific Data

1. Click and drag to highlight the desired fields in the database table [Figure 5-5].

Compliance VIEW FOR SITE : 0073			
Close	Copy	Choose Date	Help
SITE_ID	DATE	TIME	DEVICE_CAT
0073	9/20/96	10:49	LIQUID ALARM
0073	9/20/96	10:49	LIQUID ALARM
0073	9/20/96	10:49	LIQUID ALARM
0073	9/20/96	10:49	LIQUID ALARM
0073	9/20/96	10:49	LIQUID ALARM
0073	9/20/96	10:49	LIQUID ALARM
0073	9/20/96	10:49	LIQUID ALARM
0073	9/20/96	10:49	LIQUID ALARM
0073	9/20/96	10:49	LIQUID ALARM
0073	9/20/96	10:49	LIQUID ALARM
0073	9/20/96	5:45	TANK ALARM
0073	9/20/96	10:49	TANK ALARM
0073	9/20/96	4:33	TANK ALARM
0073	9/20/96	10:49	TANK ALARM
0073	9/20/96	4:49	TANK ALARM
0073	9/20/96	10:49	TANK ALARM
0073	9/20/96	5:57	TANK ALARM

Figure 5-5. Desired Data Highlighted

2. Click on the **Copy** command button. The desired fields are copied to the clipboard and can be pasted into Windows Notepad or into a word processing document.

## Viewing and Printing Reports of the Database Tables

You can select **Report** from the Main Screen to view, print, or write-to-file.

1. Select the site.
2. Select **Report** from the Main Screen. The **Report** menu drops down [Figure 5-6] (the **BIR** choice has a submenu list).

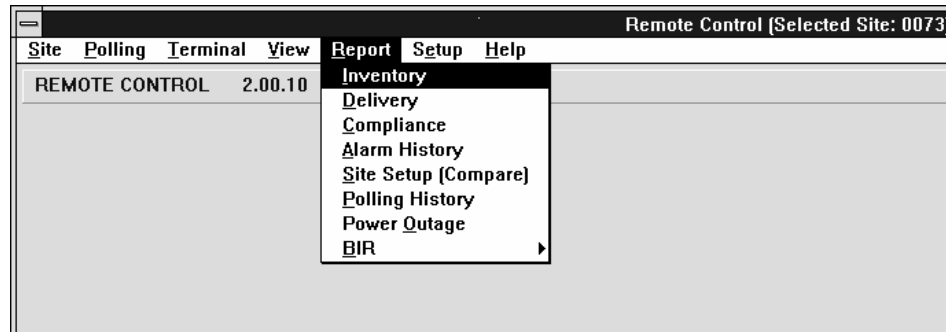


Figure 5-6. Report Menu

3. Click on the report you want to view. The chosen report's dialog box appears [Figure 5-7].



Figure 5-7. Report Dialog Box

4. Select **Window** in the **Report Destination** section.
5. Check that the **Report Source** and the **Start Date** and **End Date** are set the way you want them, then click the **OK** button. The chosen report appears.

**REMOTE CONTROL COMPLIANCE REPORT** - printed on 9/20/96

---

TEST TYPE :

DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
9/20/96	10:49		11	LIQUID ALARM	STATUS	NORMAL

DETAILS

---

TEST TYPE :

DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
9/20/96	10:49		12	LIQUID ALARM	STATUS	NORMAL

DETAILS

---

TEST TYPE :

DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
9/20/96	10:49		13	LIQUID ALARM	STATUS	NORMAL

DETAILS

22 of 22    Total: 22    100%

**Figure 5-8. Database Table in Report Format**

6. A report screen's tool buttons [Figure 5-9] operate as follows:



2 of 4






22 of 22    Total: 22    100%

**Figure 5-9. Report Screen Tool Buttons**



Goes to the first page of the report.



Page Up (one page at a time).



Page Down (one page at a time).



Goes to the last page in the report.



Stops the report before the software has read in or paginated the report.



Toggles between normal view and print preview.



Brings up the **Print** dialog box so you can print out the report.



Click on either the suitcase or letter button to bring up the **Export** dialog box so you can save the report to disk in one of several file formats.



Click on this button to close the report and return to the chosen report's dialog window.

The status numbers in the right side of the tool bar example, **22 of 22** and **Total:22**, indicate the number of entries of the total possible entries that have been read into the report. The **100%** indicates that all of the 22 entries have been read into the report.

## Printing Reports

### Printing a Partial Report

You must view the report before you can specify a page range to print. Use the following steps to view and print a partial report:

1. Select the desired site.
2. Select **Report** from the Main Screen. Click on the type of report you want to view. The chosen report's dialog box appears [Figure 5-10].

Figure 5-10. Report Dialog Box

3. Select **Window** in the Report Destination field.

4. Check that the **Report Source** and the **End Date** and **Start Date** are set the way you want them, then click the **OK** button. The chosen report appears. Press the **Magnifying Glass** button to see a print preview of the page [Figure 5-11].

REMOTE CONTROL COMPLIANCE REPORT - printed on: 8/20/00

SITE: 0073

TEST TYPE:

DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
8/20/00	10:45		1	LIQUID ALARM		NORMAL
DETAILS						
TEST TYPE:						
DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
8/20/00	10:45		2	LIQUID ALARM		NORMAL
DETAILS						
TEST TYPE:						
DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
8/20/00	10:45		3	LIQUID ALARM		NORMAL
DETAILS						
TEST TYPE:						
DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
8/20/00	10:45		4	LIQUID ALARM		NORMAL
DETAILS						
TEST TYPE:						
DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
8/20/00	10:45		5	LIQUID ALARM		NORMAL
DETAILS						
TEST TYPE:						
DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
8/20/00	10:45		6	LIQUID ALARM		NORMAL
DETAILS						
TEST TYPE:						
DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
8/20/00	10:45		7	LIQUID ALARM		NORMAL
DETAILS						
TEST TYPE:						
DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
8/20/00	10:45		8	LIQUID ALARM		NORMAL
DETAILS						
TEST TYPE:						
DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
8/20/00	10:45		9	LIQUID ALARM		NORMAL
DETAILS						
TEST TYPE:						
DATE	TIME	LABEL	NUMBER	CATEGORY	REPORT	STATUS
8/20/00	10:45		10	LIQUID ALARM		NORMAL
DETAILS						

Page 1

1 of 4 22 of 22 Total: 22 100%

Figure 5-11. Print Preview of the Report

5. Click on the **Printer** button from the report screen tool bar. The **Print** dialog box appears [Figure 5-12].

Print

Printer: Default Printer [PostScript Printer on EPPCL]

OK Cancel

Print Range

☐ All

☒ Pages

From: 1 To: 4

Copies: 1

☒ Collate Copies

Figure 5-12. Print Dialog Box

- Check that the desired printer is displayed on the **Printer:** line. If it is not, click on **Cancel** to return to the report's dialog box, then click on **Print Setup** to change the printer or its settings [Figure 5-13].

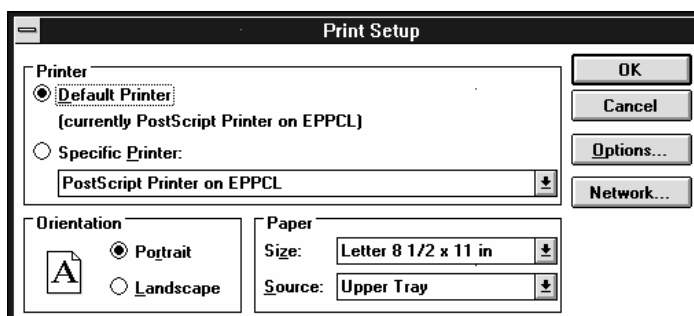


Figure 5-13. Print Setup Dialog Box

- After making print setup changes click on the OK button, then click on the OK button in the report dialog box and the report reappears. Click on the printer icon button and the **Print** dialog box reappears.
- Click on **Pages** in the **Print Range** selection field.
- Highlight and enter the desired pages in the **From:** and **To:** entry fields.
- Check that the desired number of copies in the **Copies:** entry field is correct (highlight and enter the desired number of copies if it isn't), then click **OK**.

## Sending a Report Directly to the Printer

You can print the entire report without viewing it first.

- Select the desired site.
- Select **Report** from the Main Screen. The report menu drops down.
- Click on the type of report you want to print. The Report dialog box appears [Figure 5-14].

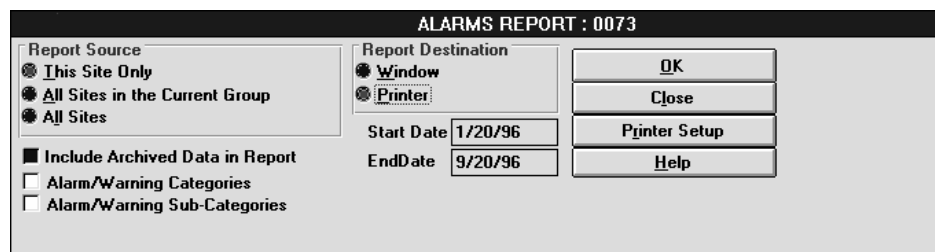


Figure 5-14. Report Dialog Box Set to Print Directly.

- Select **Printer** in the Report Destination field
- Check that the Report Source and the Dates are set the way you want them, then click **OK**.

6. The Printing dialog box appears. The Printing dialog box will update you of the printing status as it prepares the report for the printer. You stop printing by clicking on the **Cancel Printing** button.



Figure 5-15. Printing Status Box

## Exporting a Report to File

From the Main Screen **Report** Menu, click on the report you want to export. The Report Dialog box appears. Make the **Report Source** and **Start/End Date** selections. Click in the **Include Archived Data In Report** box if you want to include this data with the current report. In the **Report Destination** section, select **Window**. Click on the **OK** button. The report appears. Click on the Suitcase or Letter button and the **Export** dialog box appears [Figure 5-16].

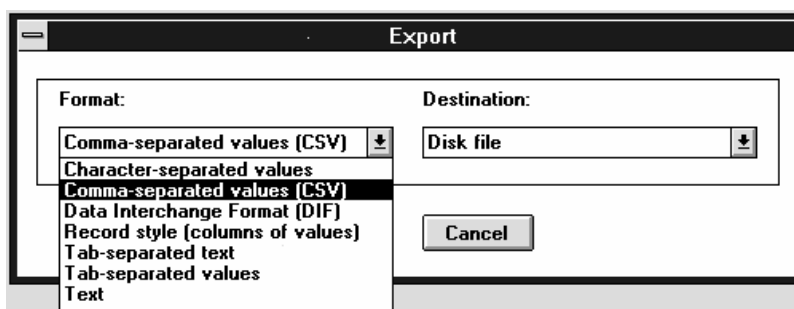
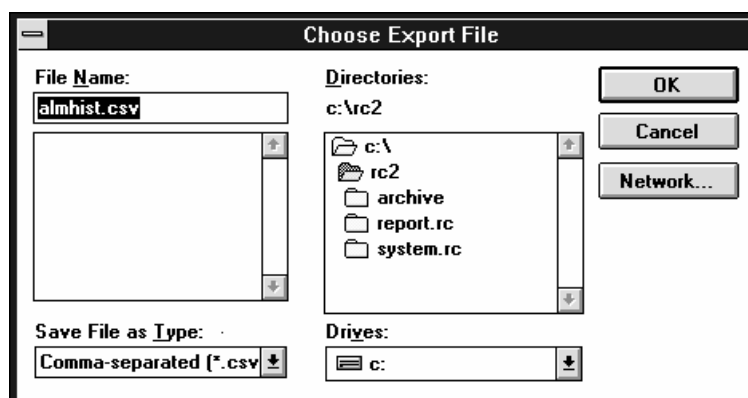


Figure 5-16. Export Dialog Box

Depending on which file format you choose, additional dialog boxes will appear concerning format choices you must make before saving the file. As prompted, make the necessary selections, click **OK** to continue until you see the **Choose Export File** dialog box [Figure 5-17].



**Figure 5-17. Choose Export File**

Rename your file if desired, make the necessary destination choices, and click **OK**.



# Terminal Mode

---

Operating in Terminal Mode permits you to connect to a site by either modem or by a direct cable connection between the PC and the TLS console. Commands are sent by first selecting a command category and then a specific command. The TLS console's response to the command is displayed on the screen.

In Terminal Mode you can send commands included with your version of Remote Control or you can add User Defined Commands to access data provided by console software upgrades. The data requested in Terminal mode is not stored in the polling database tables, but it can be captured to a text file.

## Terminal Mode Operation and Polling

---

You can not enter Terminal Mode if a Poll is in progress, unless you pause polling by selecting **Pause Polling** from the **Polling** menu on the Main Screen. The poll will halt AFTER the site currently being polled hangs up. Also, Remote Control will not poll while you are in Terminal Mode. If you are in Terminal Mode and a poll is about to begin a **Polling is Scheduled. Polling is Paused** message will appear in the Communications Status Bar in the lower left corner of the Terminal window and the Poll will be put in the Polling Queue. When you exit Terminal Mode the scheduled poll will automatically begin.

## Entering the Terminal Mode

---

Click on **Terminal** from the Main Screen to enter the Terminal Mode. The Terminal Mode screen will appear [Figure 6-1].

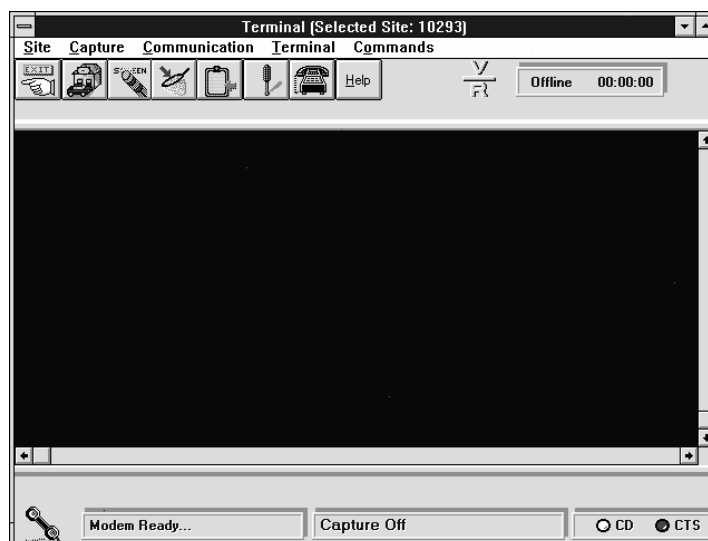


Figure 6-1. Terminal Mode Screen

## Terminal Mode Tool Bar

There are three ways to use the terminal mode commands:

- ☐ You can click on the Menu Bar selections.
- ☐ You can use the keyboard.
- ☐ You can use the Terminal mode tool bar icons [Figure 6-2].



Figure 6-2. Terminal Mode Tool Bar



**Exit Icon-** Click on this icon to exit terminal mode and return to the Main Screen. Icon performs the same function as selecting **Exit Terminal** from the **Site Menu**.



**Select Site icon-** Click on this icon to go to the site directory dialog box. Icon performs the same function as choosing **Select Site** from the **Site menu**.



**Clear Screen icon-** Click on this icon to clear the text from the terminal mode screen. Icon performs the same function as selecting **Clear Screen** from the **Terminal menu**.



**Capture icon-** Click on this icon to begin and end a capture (data to a text file) operation. Icon performs the same function as selecting **Begin Capture** or **End Capture** from the **Capture menu**.



**Copy to Clipboard icon-** Click on this icon to copy highlighted text from the terminal window to the windows clipboard. There is no menu equivalent for this icon.



**Tool icon-** Click on this icon to access the Terminal Mode Settings dialog box. This dialog box enables you to change the display options for terminal mode. Icon performs the same function as selecting **Setup** from the **Terminal menu**.



**Telephone icon-** Click on this icon to connect to or hang up on a site. Icon performs the same function as selecting **Connect to Site** or **Disconnect** from the **Communication menu**.

## Changing the Terminal Screen Display Settings

You can change the terminal mode settings to your preferences. You can change settings like the colors and fonts used in the terminal mode.

When in Terminal Mode, use the following procedure to change the terminal settings:

1. Click on the **Tool** button or select **Setup** from the **Terminal** menu. The Terminal settings dialog box appears [Figure 6-3].
2. Change the desired settings in the appropriate text boxes. You can immediately see the results of your changes in the **Sample:** box. The windows with the arrow button beside them have additional choices. Click on the arrow buttons to display options. Leave the default settings for **Emulation:**, **Scrollback Rows:**, and **Screen Filter** unless you have a specific requirement for an alternate choice. To change the **Back:** or **Fore:** colors drag the new color onto the existing color.
3. Click on the **OK** command button if you are satisfied with the changes or click on **Cancel** to return to the previous settings.

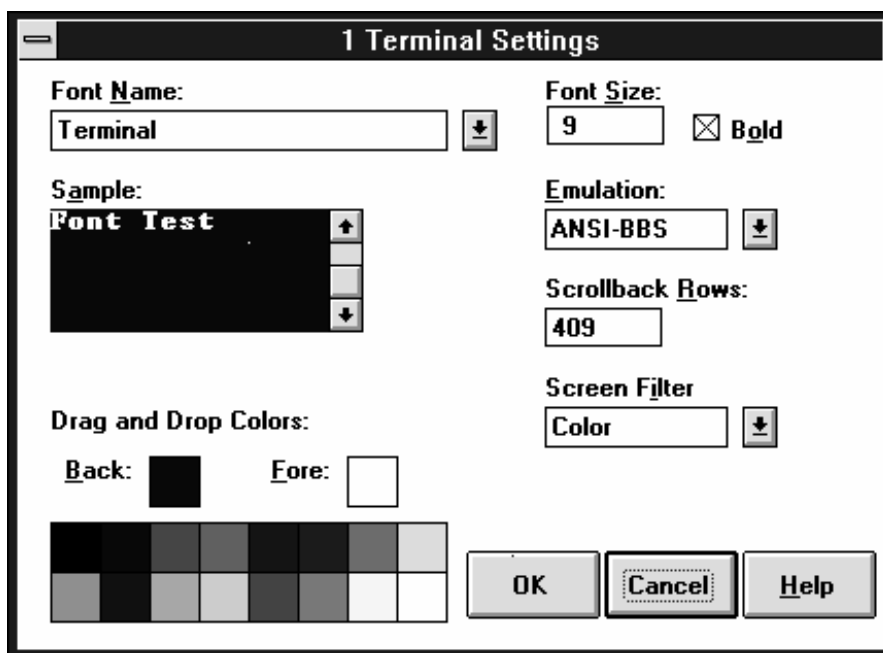


Figure 6-3. Terminal Mode Settings dialog box

# Selecting a Site in Terminal Mode

To communicate in Terminal Mode you must first select a site.

1. Click on the **Select Site** icon or go choose **Select Site** from the **Site** menu. The site directory dialog box appears [Figure 6-4].

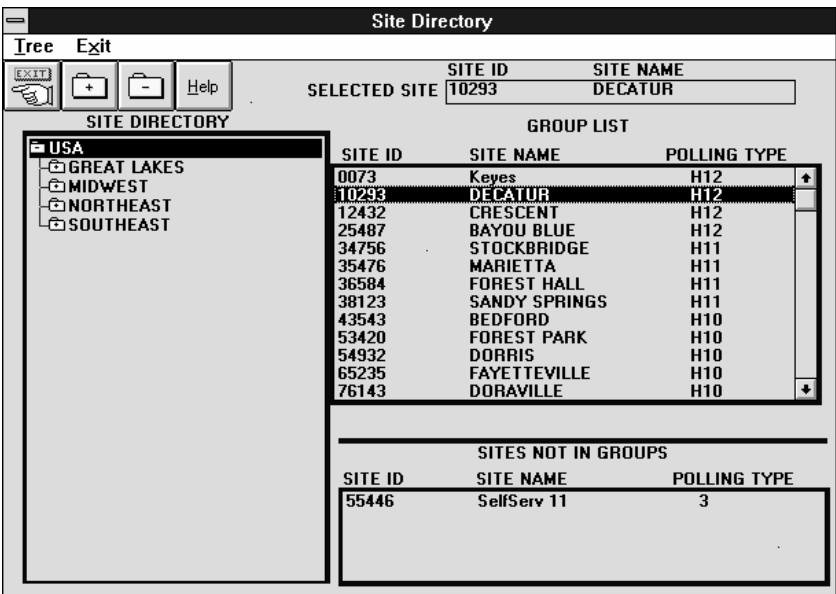


Figure 6-4. Site Directory dialog box

2. Double-click on the desired site or single-click on the desired site and then click on the **EXIT** command button. You are returned to the Terminal screen with the desired site selected (To verify what site is selected, check the Active Bar at the top of the Main Screen. It should display: REMOTE CONTROL (SELECTED SITE: followed by the ID number of the site).

## Connecting to a Site

You can use the tool bar buttons to connect to a site. You can also use the Menu bar for each of these commands.

1. Click on the **Select Site** button. The **Site Directory** dialog box appears (Figure 6-4).
2. Click on the desired site and then click on the **EXIT** button.
3. Click on the telephone button. The **Dialing Selected Site: (site ID)** dialog box will appear while remote control connects to the site [Figure 6-5]. When the connection is made the telephone icon will lift off the cradle to indicate that you are connected. The **Online** timer [Figure 6-6] will display the elapsed connect time and the Communications Status Bar [Figure 6-7], on the bottom of the terminal mode screen, will display the status of the connection in the left text box and the results of an operation (e.g., screen cleared) in the right text box. Note that the CD (carrier detected) and CTS (clear to send) lights will turn red (just like the status lights on a modem).

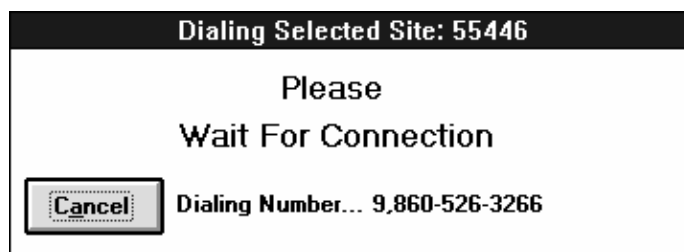


Figure 6-5. Dialing Selected Site Dialog box

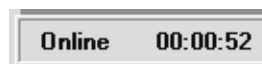


Figure 6-6. Online Clock Timer

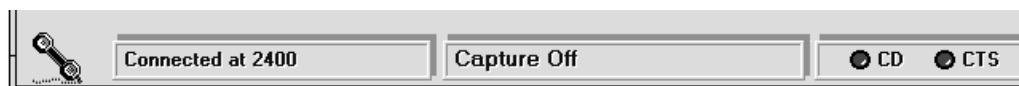


Figure 6-7. Communications Status Bar

4. You can now go to the **Command** menu and select a category of command to send to the site [Figure 6-8]. The specific command list dialog box will appear [Figure 6-9].

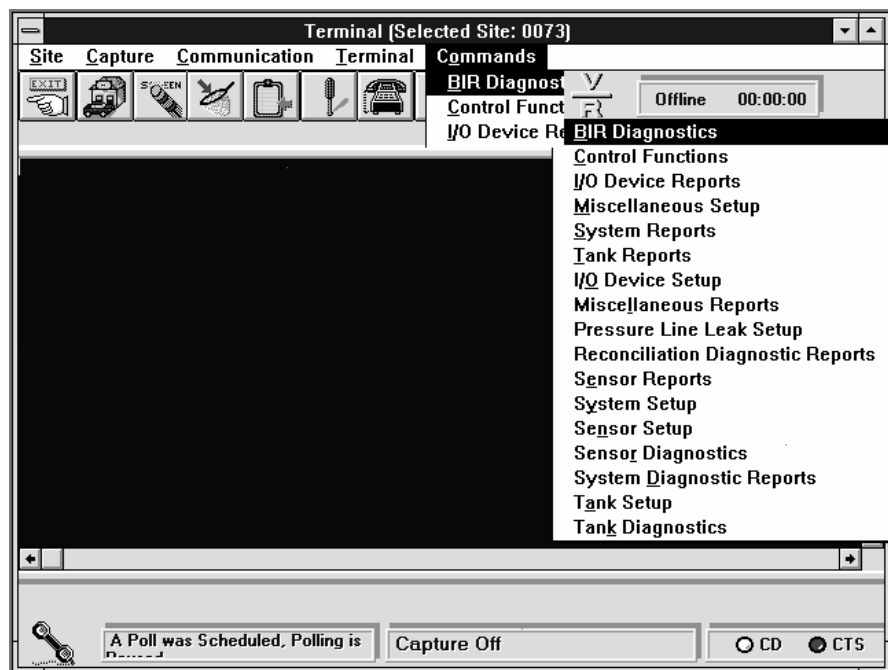


Figure 6-8. Selecting a Category of Command

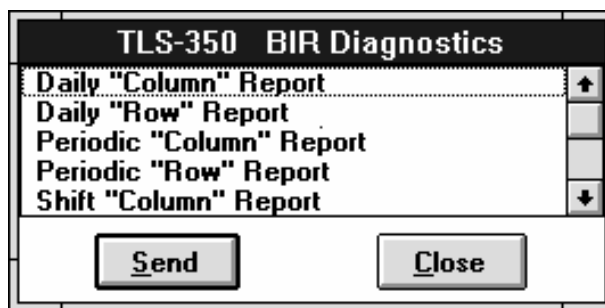


Figure 6-9. Specific Command List Dialog Box

**Important** ☞ Control Functions commands will change the configuration of the site's console. Be sure you know what each of these commands will do before you use them.

- Click on the desired command to send to the site then click on the **Send** command button. The desired data will appear in the terminal mode window [Figure 6-10].



Figure 6-10. A Command's Response Displays in the Terminal Window

## Disconnecting in Terminal Mode

When you are done working with a site in terminal mode you can hang up by clicking on the telephone icon. The **HangUp OK** message will appear in the Communications Status Bar, the **CD** indicator will turn white [Figure 6-11]. Also the telephone icon will change with the handset shown returned to its cradle.

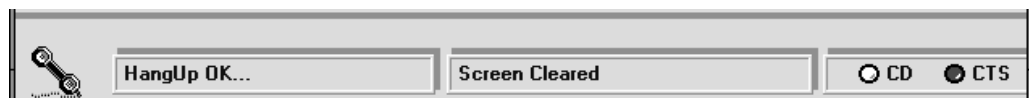


Figure 6-11. Hanging Up in Terminal Mode

## Capturing Site Data in Terminal Mode

This choice allows you to capture all data received from the site to a text file. You will be prompted for a directory path and file name. The data written to the capture file will be ASCII text.

Use the following procedure to select a site and capture data from it:

1. Go into Terminal Mode (select **Terminal** from the Main Screen).
2. Click on the Select Site button. The **Site Directory** dialog box appears.
3. Click on the desired site and then exit the dialog box.
4. Click on the telephone button. The software will connect to the site (it will dial if you are using a modem).
5. Click on the **Capture** button or select **Begin Capture** from the **Capture** menu. The **Capture File Name** dialog box appears [Figure 6-12].

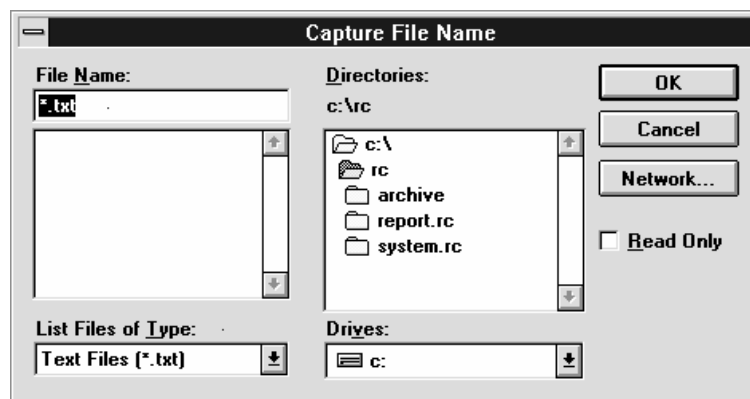


Figure 6-12. Capture File Name dialog box

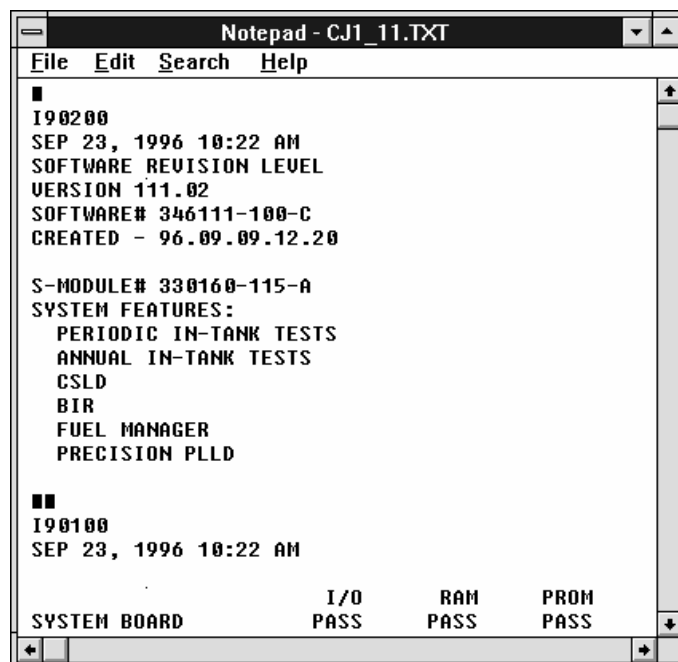
6. Remote Control requires that you name the text file and assign it to a directory (in the capture file name dialog box). Click on the **OK** command button when you are satisfied with the file name and directory path.
7. Select a command to send to the site from the **Commands** menu. The response will be captured to the assigned text file.
8. When you are finished sending commands, click on the Capture button to stop capturing data to the text file.
9. When you are finished working on this site, click on the Telephone button to disconnect from the site (hang up).



10. When you are finished working in terminal mode click on the **Exit** button to return to the Main Screen.

## Viewing the Captured Data

After the data is captured to a text file you can open it with a word processing program or Windows Notepad and edit the text, copy, paste, and perform many other typical word processing functions. Figure 6-13 illustrates a captured text file that was opened in Windows Notepad.



The image shows a Windows Notepad window titled "Notepad - CJ1\_11.TXT". The menu bar includes "File", "Edit", "Search", and "Help". The text content is as follows:

```
■
I90200
SEP 23, 1996 10:22 AM
SOFTWARE REVISION LEVEL
VERSION 111.02
SOFTWARE# 346111-100-C
CREATED - 96.09.09.12.20

S-MODULE# 330160-115-A
SYSTEM FEATURES:
  PERIODIC IN-TANK TESTS
  ANNUAL IN-TANK TESTS
  CSLD
  BIR
  FUEL MANAGER
  PRECISION PLLD

■■
I90100
SEP 23, 1996 10:22 AM

SYSTEM BOARD      I/O    RAM    PROM
                  PASS   PASS   PASS
```

Figure 6-13. Captured Data Displayed in Windows Notepad

## Writing a User Defined Command

This feature allows you to enter new RS-232 Serial Interface User Defined Commands (UDCs) that you can send to the site from the Terminal Mode. This feature is useful if your version of Remote Control does not support new system commands added in a TLS Console software upgrade; or, if a service bulletin recommends the entry of a new command to improve system performance, etc.

The data requested with a UDC can ONLY be made in Terminal Mode and will NOT be entered in the polling databases; however, you can capture terminal mode screen data and paste it into Windows Notepad or into a word processor file.

Once a UDC is entered under a system type (e.g., TLS-250) it becomes part of that system type command list until you delete it.

It is important that you consult the Veeder-Root Serial Interface Command Manuals (No. 576013-635 for Guardian, TLS-300s., TLS-350, TLS-350R, and VR-3000 Consoles or No. 576013-693 for TLS-250 and TLS-250i Consoles) when entering User Defined Commands for TLS consoles. In these manuals TLS system commands are listed as Function Codes. Each Function Code has a Function Type (name) and two Command Formats (Display for a formatted data response [recommended], and Computer for a raw data response.). The Function Type and the recommended Command Format will be required when entering a new UDC.

### Writing a new User Defined Command

1. Click on **Commands** on the terminal mode menu bar then click on **New**. The **User Defined Commands** dialog box appears [Figure 6-14].

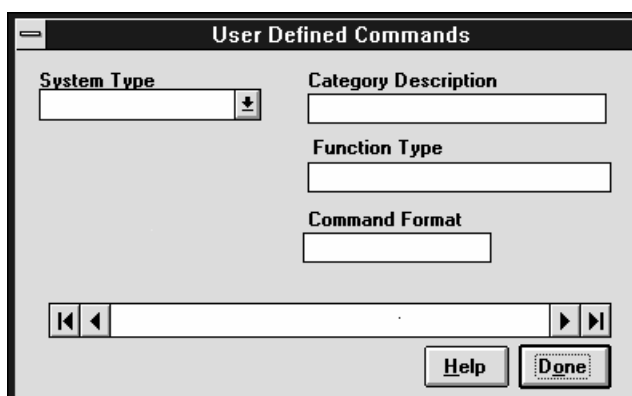
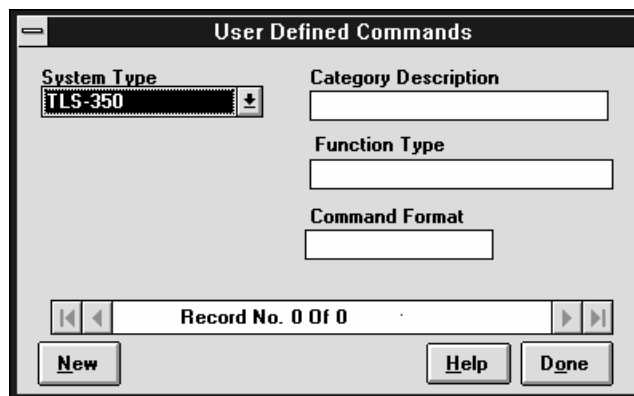
The image shows a dialog box titled "User Defined Commands". It has a light gray background and a dark gray title bar. Inside the dialog, there are four input fields arranged in a vertical stack on the right side. The first field is labeled "System Type" and has a small dropdown arrow on its right. The second field is labeled "Category Description". The third field is labeled "Function Type". The fourth field is labeled "Command Format". At the bottom of the dialog, there is a horizontal scroll bar with left and right arrow buttons. Below the scroll bar, there are two buttons: "Help" and "Done".

Figure 6-14. User Defined Commands Dialog Box

2. From the **System Type** drop down list, select the system type of the site. If there are previously entered User Defined Commands (UDCs), the **Category Description** text box will display **U&ser Defined\*** and **Record No. 1 of n**. In the example below there are no UDCs for the TLS-350 system type [Figure 6-15].

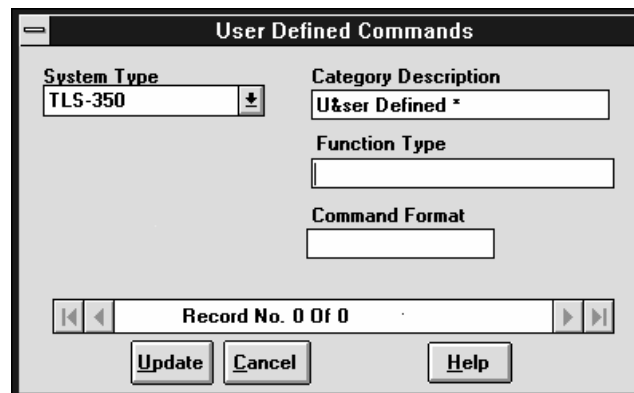


The dialog box titled "User Defined Commands" contains the following elements:

- System Type:** A dropdown menu with "TLS-350" selected.
- Category Description:** An empty text input field.
- Function Type:** An empty text input field.
- Command Format:** An empty text input field.
- Record No. 0 Of 0:** A text box with navigation arrows on either side.
- Buttons:** "New", "Help", and "Done" are located at the bottom.

Figure 6-15. Creating a New User Defined Command

3. Click on **New** and the **Category Description** text box will display **U&ser Defined\*** and **Record No. 0 of 0** in the UDC totals text box [Figure 6-16].



The dialog box titled "User Defined Commands" contains the following elements:

- System Type:** A dropdown menu with "TLS-350" selected.
- Category Description:** A text input field containing "U&ser Defined \*".
- Function Type:** An empty text input field.
- Command Format:** An empty text input field.
- Record No. 0 Of 0:** A text box with navigation arrows on either side.
- Buttons:** "Update", "Cancel", and "Help" are located at the bottom.

Figure 6-16. Entering the UDC

4. Enter the function type from the Serial Interface Command manual in the **Function Type** text entry box. We recommend that you enter the exact Function Type as it appears in the manual for this function code.

##### 5. FOR GUARDIAN, TLS-300, TLS-350, TLS-350R, and VR-3000 CONSOLES:

Your entry in the **Command Format** text box must be exactly as follows:

^AIXXX00

where: ^ = the character made by holding down the shift key and pressing the 6 key

A = the character made by holding down the shift key and pressing the a key

I = the character made by holding down the shift key and pressing the i key

XXX = the numeric or alphanumeric (caps only) Function Code from the Serial Interface Manual

00 = two zeros (requests all data)

For example, suppose you want to enter a UDC for TLS-350 Console Function Code 34B. In the Serial Interface Manual under Function Code 34B you find:

**Function Code:** 34B

**Function Type:** Universal Sensor Status Report

##### Command Format:

**Display:** <SOH>I34BSS

**Computer:** <SOH>i34BSS

followed by examples of the typical response messages in formatted display format (recommended) and computer format.

Therefore your entry in the **Function Type** text box would be (any abbreviation to fit the 25 character limit):

**Univ Sensor Stat Rprt**

Your entry in the **Command Format** text box would be [Figure 6-17]:

^AI34B00

Figure 6-17. Adding a UDC for TLS-350 System Type

**FOR TLS-250 AND TLS-250i CONSOLES:**

Refer to Section 8.0 Function Code Summary beginning on page 73 of the TLS-250 RS-232 Interface Manual No. 576013-693. The recommended function codes for use as UDCs are OPERATIONAL REPORTS (Display Format) starting with 20T and ending with 2GS; SETUP FUNCTIONS (Display Format) starting with 700 and ending with 8GS; and DIAGNOSTIC REPORTS (Display Format) starting with 90T and ending with function code 9D0.

Your entry in the **Command Format** text box must be exactly as follows:

^AXXX

where: ^ = the character made by holding down the shift key and pressing the 6 key

A = the character made by holding down the shift key and pressing the a key

XXX = the numeric or alphanumeric (caps only) Function Code from the Serial Interface Manual (for function codes ending in T, substitute a zero to request data for all tanks).

For example, suppose you want to enter a UDC for TLS-250 Console Function Code 64T. In the Serial Interface Manual under Function Code 64T you find:

**Function Code:** 64T or 84T (All Systems)

**Function:** Set Tank Diameter

**Command Format** <SOH>64Tllhh

**Typical Response Message:** <SOH>64Tllhh

followed by definitions of T, l, and h.

Therefore your entry in the **Function Type** text box would be (any abbreviation to fit the 25 character limit):

**Set Tank Diameter**

Your entry in the **Command Format** text box [Figure 6-18] would be:

^A640 (substituting 0 for T to get data on all tanks)

**Figure 6-18. Adding a UDC for TLS-250 System Type**

- When you are done click on the **Update** command button and this UDC is added to the User Defined list of commands under either the TLS-350 or TLS-250 System Type as required. When you ready to send this UDC, enter Terminal Mode, click on **Commands**, select **TLS-350** and you see **User Defined\*** at the bottom of the list as a reminder that there are UDCs assigned to either the TLS-250 or TLS-350 system type [Figure 6-19]. In the example below you have a UDC in a TLS-350 system type.

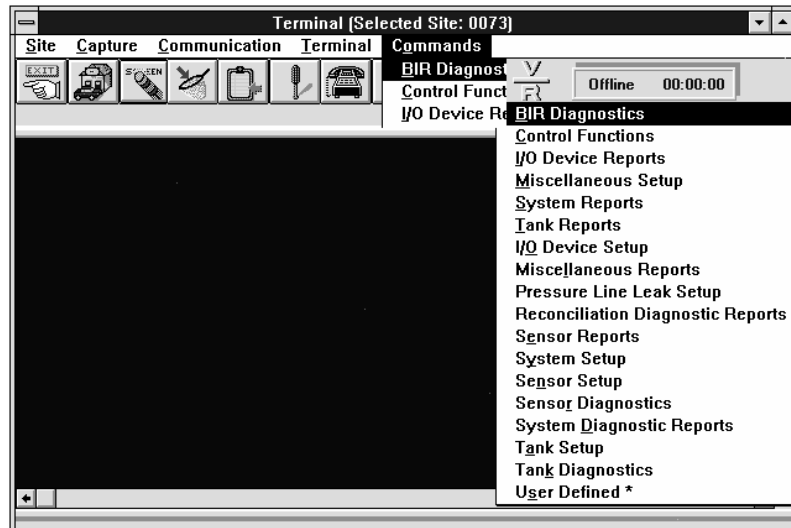


Figure 6-19. User Defined Commands Reminder

## Sending a UDC

- In Terminal Mode, connect to the desired site.
- Under **Commands**, Select **TLS-350** or **TLS-250** System Type, then select **User Defined \***. The **TLS-X50 User Defined\*** specific command dialog box appears [Figure 6-20].

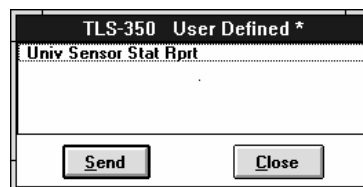


Figure 6-20. UDC Specific Command Dialog Box

- Click on the UDC you want to send and then click on the **Send** button. The requested data will appear on the Terminal screen. When you have finished sending UDCs, click on the **Done** button to close the specific command dialog box.

## Editing a UDC

Once you have entered a User Defined Command, you can go back and make changes to it.

1. Click on **Commands** on the terminal mode menu bar then click on **New**. The **User Defined Commands** dialog box appears [Figure 6-14].
2. Select the system type from the **System Type** drop down list. In this example you select TLS-350 System Type. The **User Defined Commands** dialog box will change to display the number of UDCs (records) for the selected system type [Figure 6-21].

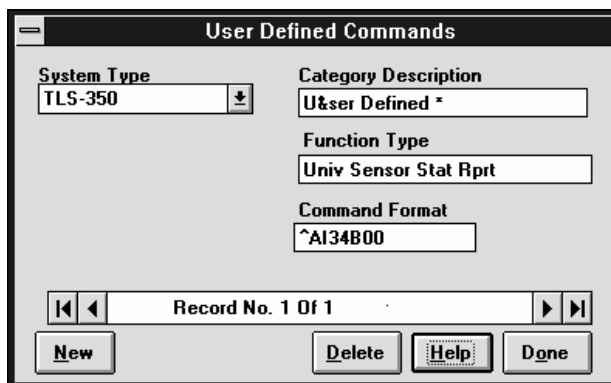


Figure 6-21. Editing a UDC

3. The Category Description text box will indicate that this is a **U&ser Defined\*** command and will be display the first record (command) saved for this system type
4. Use the scroll bar if necessary to get to the UDC you want to edit, make the changes, and then click on the **Done** command button.

## Deleting a UDC

If you have a User Defined Command that you no longer use you can delete it from the list. Use the following procedure to delete a command from the list.

1. Click on **Commands** on the terminal mode menu bar then click on **New**. The **User Defined Commands** dialog box appears [Figure 6-14].

2. Select the system type from the **System Type** drop down list. The **User Defined Commands** dialog box will change to display the number of UDCs (records) for the selected system type [Figure 6-22].

The image shows a dialog box titled "User Defined Commands". It contains several input fields and buttons. The "System Type" field is a dropdown menu with "TLS-350" selected. The "Category Description" field contains "U&ser Defined \*". The "Function Type" field contains "Univ Sensor Stat Rprt". The "Command Format" field contains "^A134B00". Below these fields is a scroll bar with the text "Record No. 1 Of 1". At the bottom of the dialog are four buttons: "New", "Delete", "Help", and "Done".

**Figure 6-22. First Record in the List**

3. Use the scroll bar if necessary to get to the UDC you want to delete.
4. Click on the **Delete** command button. This UDC will be deleted from the list.



# Comparing Configurations

When you first poll a site for setup information it is saved in the **Site Setup** table. Every poll of this site for setup information thereafter is saved in the **Recent Setup Review** table. When you access the **Hardware Setup** dialog box you can view these two tables side by side, and if necessary, modify the **Site Setup** table. This is a powerful feature of Remote Control. With it you can quickly restore your site's setup if it's lost, download a setup to a new site and easily modify it, or quickly troubleshoot and correct a setup if you have a setup data warning (or alarm).

## Configuration Comparison Procedure

1. Select a site that you have already polled for setup data. From the Main Screen, click on **Start Polling Now** under the **Polling** menu. The **Poll Now** dialog box appears. In the **Commands To Poll** list select **Set Up (collect from TLS-X50)**.
2. Click on the **Poll Now** button. Wait for the poll to complete
3. Click on **Hardware Setup** under the Main Screen's **Setup** menu [Figure 7-1].
4. Select the setup you want to compare (General Setup, Tank Setup, etc.) in the **Setup View** section of the dialog box.
5. Compare the **Site Setup** column (P-table) to the **Recent Setup Review** column (R-table). If the entries for a field are the same, a green ✓ will appear in the **Equal** column. If they are different a red X will appear in the **Equal** column.

Description	Site Setup	Recent Setup Review	Equal
System Units	U.S.	U.S.	✓
System Language	ENGLISH	ENGLISH	✓
Periodic Test Warning	Disabled	Disabled	✓
Days Before Periodic Test Warning	25	25	✓
Days Before Periodic Test Alarm	30	30	✓
Annual Test Warning	Disabled	Disabled	✓
Days Before Annual Test Warning	355	355	✓
Days Before Annual Test Alarm	365	365	✓
Page Eject Flag	Disabled	Disabled	✓
Set Print Temperature Compensation Flag	Enabled	Enabled	✓
Set Print Temperature Compensation Value	60.0	60.0	✓
Tank Test Shutdown Time			✓

Figure 7-1. Hardware Setup Dialog Box (TLS-350 System Type)

## Editing the Site Setup

You can easily change the entry in any field in the **Site Setup** table from the **Hardware Setup** dialog box.

1. Double click on the entry in the field you want to change (or click on it once and then click on the **Edit** command button). The **EDIT** dialog box will appear with a text entry box [Figure 7-2 shows the dialog box to edit the Header Text #1 field].
2. Enter the desired text or value then click on the **OK** command button. The field is changed in the database table.

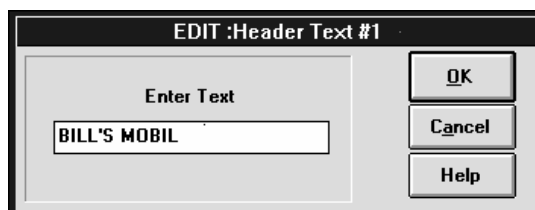


Figure 7-2. EDIT Dialog box

3. When you are done editing the fields you can save the changes by exiting the screen. Click on the **Exit** button. A dialog box appears asking if you want to update your changes [Figure 7-3].



Figure 7-3. Setup Has Changed Dialog Box

4. Click on the **Yes** button to save the changes or click on the **No** button to exit the **Hardware Setup** dialog box without saving them.

## Comparing Different Site Setups

1. Select the first of the two sites. Click on **Hardware Setup** under the **Site** submenu of the **Setup** Main Screen menu. Click on the **Other Site** button at the top of the **Hardware Setup** dialog box. The **Select a Site to Compare Against** dialog box appears [Figure 7-4].

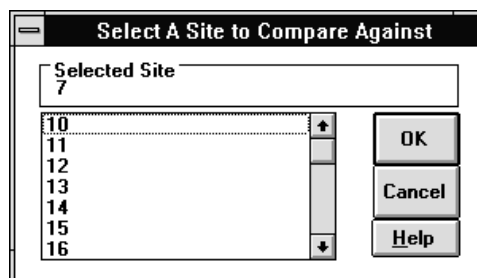


Figure 7-4. Select a Site to Compare Against dialog box

2. Click on the ID of the second site in the list which you want to compare to the first, then click on the **OK** button. The second site's setup and name will be displayed in the **Recent Setup Review** column.

## Downloading One Site's Setup to Another Site

Use the following steps when you want to download a portion or all of the setup of one site to another site.

1. Select the first of the two sites (Note, you can only download from the first site you select to the second site). Click on **Hardware Setup** under the **Site** submenu of the **Setup** Main Screen menu. The **Hardware Setup** dialog box appears. In the Setup View section click on the setup you want to compare to, and possibly download from, the first site to the second site.
2. Click on the **Other Site** button at the top of the **Hardware Setup** dialog box. The **Select a Site to Compare Against** dialog box appears. Click on the ID of the second site, then on the **OK** button. The second site's setup and name will be displayed in the **Recent Setup Review** column.
3. If you want to download some of the fields to the second site, click on the desired field(s) to copy and then click on the **Accept** command button. Click on the **Exit** button when you have finished downloading the fields. The **Setup Has Changed** dialog box appears. Click on the **Yes** button to save the changes (or on the **No** button to exit the **Hardware Setup** dialog box without saving them). You can select another setup category from the Setup View section of the dialog box, select the fields in that setup you want to copy, accept the changes, and continue through the entire list of setup categories if necessary. When you have copied all of your changes, go to step 6.

4. To copy an entire setup selection, click on the **Accept All** command button to copy the complete setup from the first site to the second (however, you may then want to edit some of the fields such as the header information, phone number, etc.).
5. When you are done editing the fields you can save the changes by clicking on the **Exit** button. The **Setup Has Changed** dialog box appears asking if you want to update your changes. Click on the **Yes** button to save the changes (or the **No** button to exit the **Hardware Setup** dialog box without saving them). You can copy additional setup categories as necessary until you are ready to download the setup.
6. Go to the Main Screen and from the **Polling** menu select **Start Polling Now**. In the **Poll Now** dialog box click on **Set Up (Send to TLS-X50)** in the **Commands To Send** list, then click on the **Poll Now** command button to download the setup [Figure 7-5].

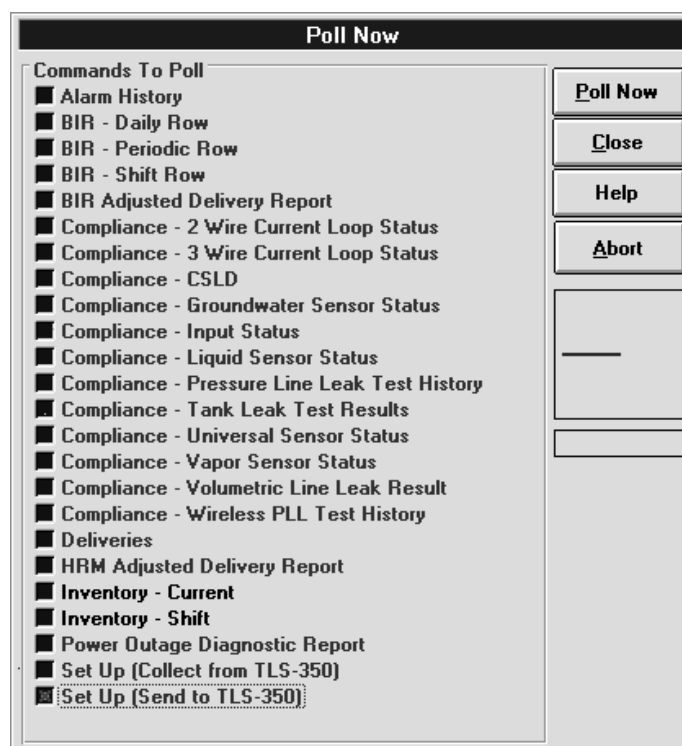


Figure 7-5. Poll Now Dialog Box

## Printing a Setup Report

You can print a Site Setup Report directly from the **Hardware Setup** dialog box.

1. Click on the **Print** button from the Hardware Setup screen. The **Site Setup Report (Comparison)** dialog box appears [Figure 7-6].

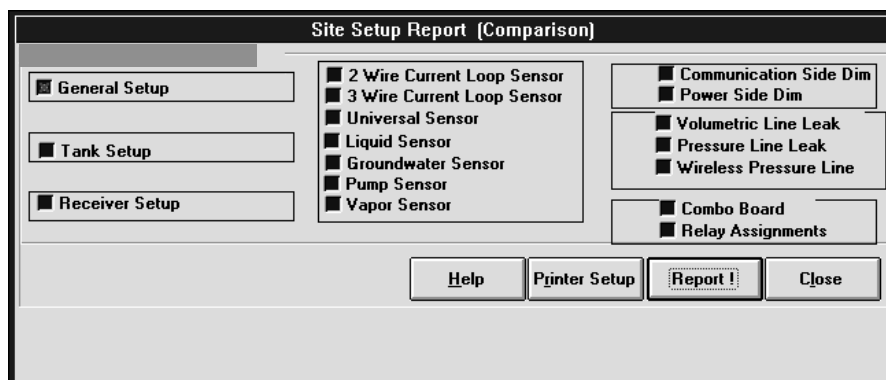


Figure 7-6. Site Setup Report (Comparison) Dialog Box

2. Select the type of comparison report you want to print by clicking on the appropriate option button.
3. Click on the **Report!** command button to print the configuration comparison in report format. (You can change the printer or its options by clicking on the **Printer Setup** command button before the **Report!** button. The Windows **Print Setup** dialog box will appear. Make the necessary changes for your printer and click **OK**.)



# Connecting To A TLS Console

There are two methods of connecting your PC to TLS Consoles, by RS-232 direct connection and/or by modem. The direct connect method is used onsite to connect to a single console while the remote connect method requires a telephone line with modems at each end for the PC and the TLS Console.

## Equipment Needed

Table 8-1 below describes the equipment you need to connect a PC to various Veeder-Root consoles.

**Table 8-1. Connecting a PC to Veeder-Root Consoles**

CONSOLE	DIRECT CONNECT				REMOTE CONNECT				
	CABLE, NULL MODEM <50 FT		DATA TRANSFER	REMOTE CONTROL INTERFACE MODES					
	CONNECTORS				MODEM	CONNECTORS		DATA TRANSFER	REMOTE CONTROL INTERFACE MODES
	@PC	@CONSOLE				@MODEM	@CONSOLE		
Guardian	Female DB-9 or DB-25	Male DB-25	Serial RS-232	Terminal Only					
TLS-250	Female DB-9 or DB-25	Male DB-25	Serial RS-232	Terminal/ Polling	External modem	FemaleDB-9 or DB-25	Male DB-25	Serial RS-232	Terminal/ Polling
TLS-250 Plus!	Female DB-9 or DB-25	Male DB-25	Serial RS-232	Terminal/ Polling	External modem	FemaleDB-9 or DB-25	Male DB-25	Serial RS-232	Terminal/ Polling
TLS-300	Female DB-9 or DB-25	Male DB-25	Serial RS-232	Terminal/ Polling	External modem	FemaleDB-9 or DB-25	Male DB-25	Serial RS-232	Terminal/ Polling
VR-3000					Console Internal modem		Phone & Line RJ-11 Jacks	Serial RS-232	Terminal/ Polling
TLS-350	Female DB-9 or DB-25	Male DB-25	Serial RS-232	Terminal/ Polling	External modem with internal RS-232 Interface Module, or	Female DB- 25	Male DB-25	Serial RS-232	Terminal/ Polling
					Console Internal SiteFax module		Phone & Line RJ-11 Jacks		
TLS-350R	Female DB-9 or DB-25	Male DB-25	Serial RS-232	Terminal/ Polling	External modem with internal RS-232 Interface Module, or	Female DB- 25	Male DB-25	Serial RS-232	Terminal/ Polling
					Console Internal SiteFax module		Phone & Line RJ-11 Jacks		

## Remote Connection

### PC Modem Setup

Remote Control is preloaded with over 440 different modem initialization strings that you can select from to initialize your modem. If your modem is not in the Remote Control modem database, it can be added to the database. Use the following procedure to select your modem:

1. From the Main Menu click on **Setup**. The Setup menu drops down.
2. Click on **Remote Control** from the **Setup** menu. You will have a choice between **Port** and **Modem**.
3. Click on **Modem**. The **Modem Settings** dialog box appears [Figure 8-1].

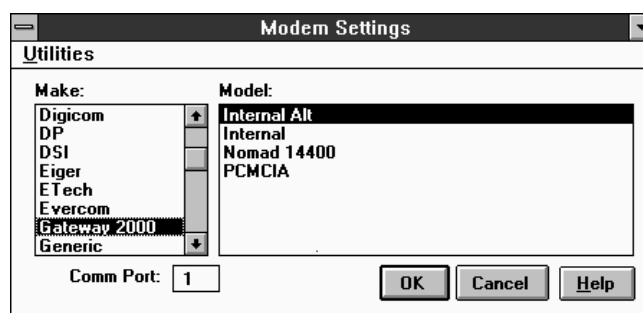


Figure 8-1. Modem Settings Dialog Box.

4. In the **Make:** selection box scroll and select the make of your modem. The **Model:** selection box will display the different models of modem for your manufacturer.
5. Select the model of your modem.
6. Check the **Comm Port:** box. If incorrect, you can change the PC's comm port by highlighting the number and typing in the correct port.

### Modem Settings Dialog Box Utilities Menu

This drop down menu list lets you edit modem settings, add a modem to the database, delete a modem from the modem database, or pack the modem database (remove all of the modem settings for modems you do not have).



### Edit Settings

You can change the settings for any selected modem in the modem database.

1. In the **Modem Settings** dialog box click on the **Utilities** menu [Figure 8-2].

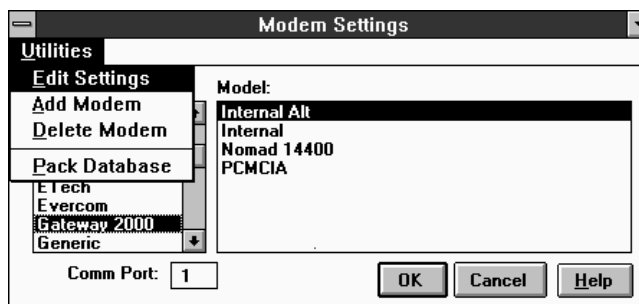


Figure 8-2. Utilities Drop Down Menu

2. Click on **Edit Settings**. The **Modem Strings** dialog box appears [Figure 8-3].

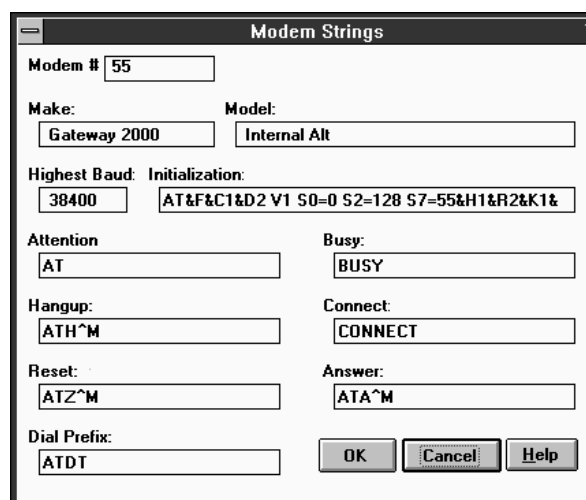


Figure 8-3. Modem Strings Dialog Box

3. The information fields in the **Modem Strings** dialog box are automatically filled in for the selected modem. Consult your modem manufacturer's manual(s) before editing these fields.

### Add Modem

If your modem is not included in the list in the **Modem Settings** dialog box, you have two options. The first option is to select **Hayes Compatible** from the list and click on the **OK** command button. The chances are very good that these settings will work with your modem since Hayes modem strings are considered the standard configuration. NOTE: use the Hayes Compatible modem choice if you are not absolutely sure what to enter from your modem manual.

The second option is to manually enter your modem's initialization data into the modem database.

1. From the **Modem Settings** dialog box, select **Add Modem** from the **Utilities** drop down menu. The Modem Strings dialog box appears.
2. Refer to your modem's manual for the appropriate information to enter in each of the fields in the **Modem Strings** dialog box. When you have finished, click on the **OK** button to save the information into the modem database.

### Delete Modem

The **Delete Modem** selection in the **Utilities** menu of the **Modem Settings** dialog box allows you to delete from the visible **Model:** list any modem highlighted in that list.

### Pack Database

This selection in the **Utilities** menu of the **Modem Settings** dialog box allows you to permanently remove modems deleted from the modem database by the **Delete Modem** selection of the **Utilities** menu.

## Port Setup

1. Select **Remote Control** from the **Setup** menu on the main screen, then click on **Port**. The **Port Setup** dialog box appears [Figure 8-4].

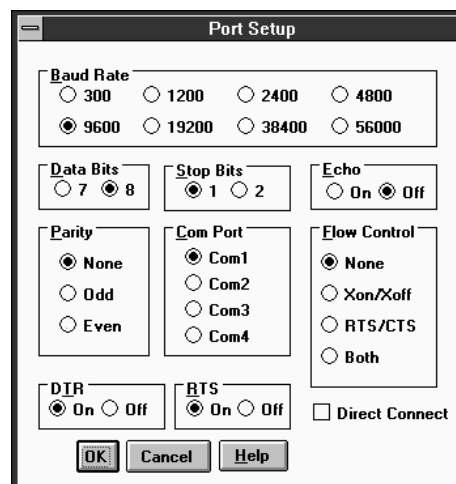


Figure 8-4. Port Setup Dialog Box

2. Verify the default settings, changing them if necessary to match those of the TLS Console. Note, you can set the Baud Rate to 9600 even though the TLS Console may be set to a lower rate.
3. You are now ready to connect to the remote TLS Console using Remote Control.

## Direct Connection

A direct connect null-modem cable can be used between your computer (PC) and the TLS Console if the cable run is no longer than 50 feet (15.2 m). Cable runs longer than 50 feet can result in data errors, component damage, or both. If cable runs from the Console to the PC exceed 50 feet, two short-haul modems should be used, one at the PC and one at the console.

### Direct Connect Via Cable

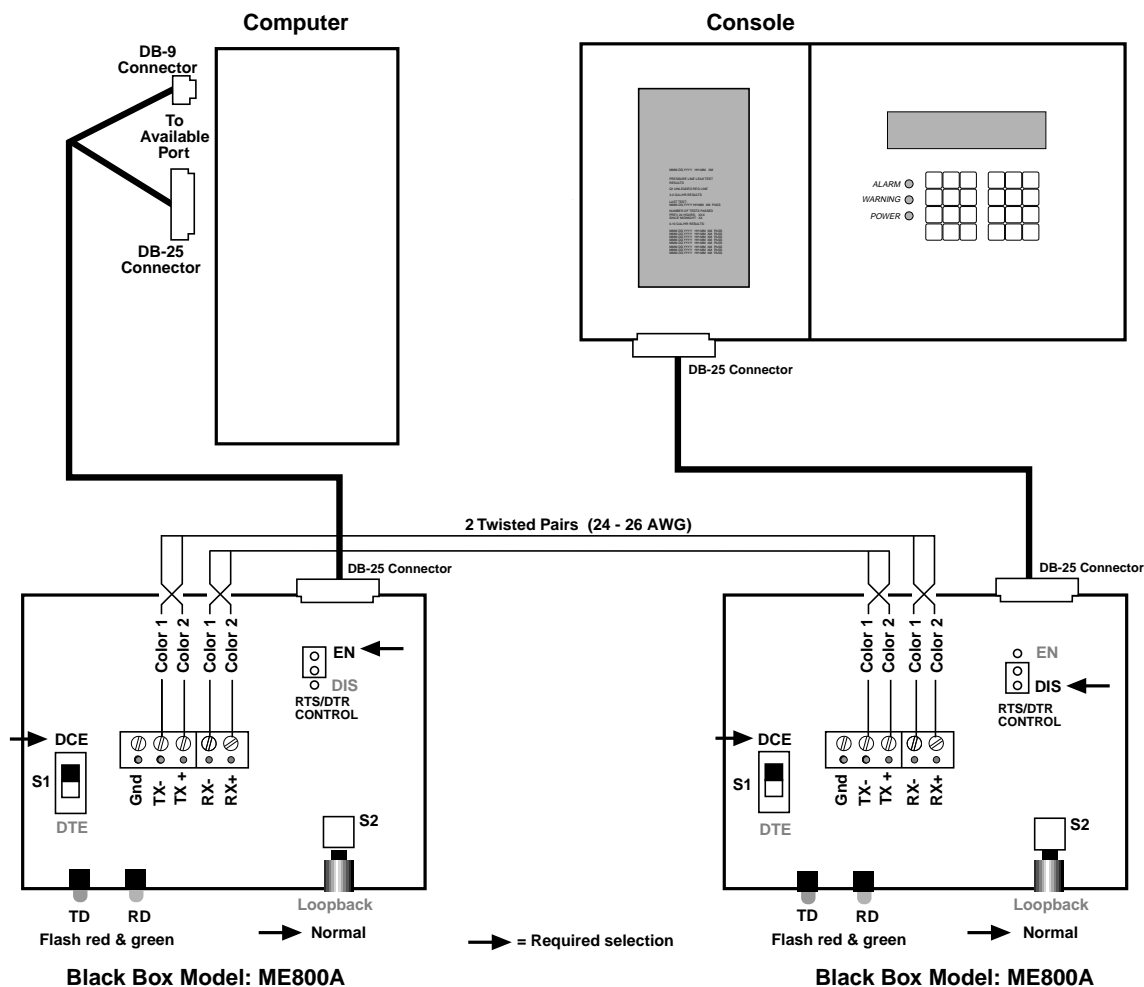
Turn off the TLS Console and your PC. Attach the male end of a null modem cable to the Console's RS-232 Board DB-25 connector (under the left side of the console). Attach the other end to the back of the PC (a DB-25 or DB-9 connector, depending on which port is available). Pin connections at each end of the null modem cable for the two types of PC connectors (25 or 9 pin) are as follows:

Console DB-25 on RS-232 Module Pin No. (Signal)		PC DB-25 Connector Pin No. (Signal)
2 (TX)	Connects to	3 (RX)
3 (RX)	"	2 (TX)
7 (Signal ground)	"	7 (Signal ground)
Console DB-25 on RS-232 Module Pin No. (Signal)		PC DB-9 Connector Pin No. (Signal)
2 (TX)	Connects to	2 (RX)
3 (RX)	"	3 (TX)
7 (Signal ground)	"	5 (Signal ground)

### Direct Connect Via Short-Haul Modem

For cable runs over 50 feet, Veeder-Root recommends an async short-haul modem, Black Box model ME800A, or equivalent. You can contact Black Box at P.O. Box 12800, Pittsburg, PA 15241 U.S.A.; telephone: (412) 746-5500; fax: (412) 746-0746; or at their Internet address <http://www.blackbox.com>

C. See Figure 8-5 for a diagram detailing how to connect the Console to the PC using short-haul modems.



tls-pc/shmodem.eps

Figure 8-5. Connecting the Console to a PC Via Short-Haul Modems

### Port Setup for Direct Connection

1. From the Main Screen select **Setup**. Click on **Remote Control**. Click on **Port**. The Port Setup dialog box appears [Figure 8-6].

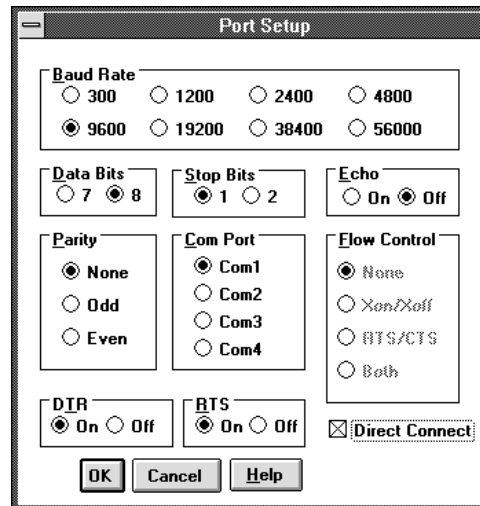


Figure 8-6. Port Setup Dialog Box

2. Select the appropriate settings for your PC. Make sure that the baud rate matches that of the console (you can set the console to a maximum baud rate of 9600 when using RS-232 direct connect).
3. Click in the **Direct Connect** box. Click **OK**.
4. You are now ready to connect to the TLS Console using Remote Control.

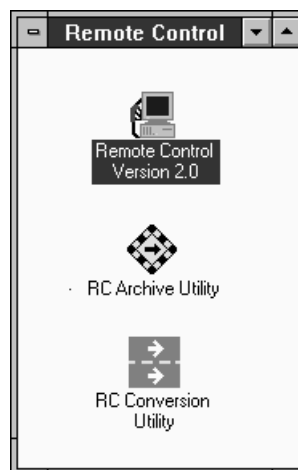


# Remote Control Utility Programs

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Two Remote Control utility programs are included with Remote Control version 2.0 [Figure 9-7]:

- ☐ RC Archive Utility - for database management, and
- ☐ RC Conversion Utility - for converting older database tables into version 2.0 table (see “Upgrading from an Older Version of Remote Control” on page 1-3) for information on using this utility.



**Figure 9-7. Remote Control Group Window**

## RC Archive Utility

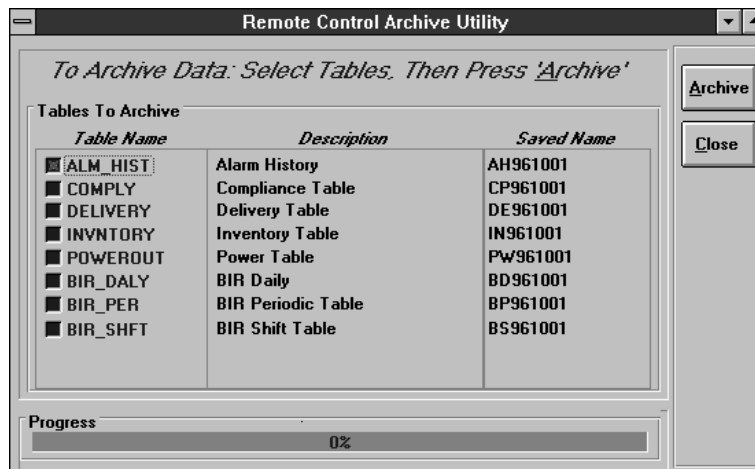
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As your polled database tables begin to expand, you will find that Remote Control will take longer to generate a report. The RC Archive Utility lets you transfer active poll database tables, whenever you like, to an archived poll database table. Each time you archive the database table, you empty the archive file actively maintained by Remote Control. This utility is especially useful if you are frequently polling multiple sites.

All of the poll database tables except Auto Poll History are archived by the RC Archive Utility and are listed below:

- ☐ Alarm History
- ☐ Compliance Table
- ☐ Delivery Table
- ☐ Inventory Table
- ☐ Power Outage Table
- ☐ BIR Daily Table
- ☐ BIR Periodic Table
- ☐ BIR Shift Table

To open RC Archive, double click on the RC Archive Utility icon. The **Remote Control Archive Utility** Dialog box appears [Figure 9-8].



**Figure 9-8. Remote Control Archive Utility Dialog Box**

In the example above, clicking on the **Archive** button saves the Alarm History table under the file name **AH961001** in the **rc\archive** subdirectory. The file **Saved Name** automatically changes daily so you will never have the same file name. The file path is automatically chosen as well.

When generating a Remote Control report and you select **Include Archived Data In Report**, these are the files that Remote Control will automatically look for to include in the report.



# Database Operational Tables

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Data that is polled from a site goes into one of several Operational Tables located on your hard drive in the **system.rc** subdirectory of the **rc** directory created when you installed Remote Control. These tables (with the .dbf file extension) will need to be archived periodically since they increase in size every time you poll and will eventually occupy a great deal of space in your hard drive. Refer to the RC Archive Utility Operation in Section 9 when you are ready to archive. Remote Control's operational tables are as follows:

Table 10-1. Alarm History Operational Table (ALM\_HIST.DBF)

Table 10-2. Compliance Operational Table (COMPLY.DBF)

Table 10-3. Delivery Operational Table (DELIVERY.DBF)

Table 10-4. Inventory Operational Table (INVNTORY.DBF)

Table 10-5. Auto Poll History Operational Table (POLLHIST.DBF)

Table 10-6. Power Outage Operational Table (POWEROUT.DBF)

Table 10-7. Daily BIR Operational Table (BIR\_DALY.DBF)

Table 10-8. Periodic BIR Operational Table (BIR\_PER.DBF)

Table 10-9. Shift BIR Operational Table (BIR\_SHFT.DBF)

**Table 10-1. Alarm History Operational Table**

**Table Name:** ALM\_HIST.DBF **Contents:** Stores All Alarm History Events From The Remote Sites

ITEM	DESCRIPTION	FIELD	TYPE	SIZE	DEC
0	Site Identification Label	SITE_ID	Character	20	
1	Alarm Category	ALM_CAT	Number	4	
2	Alarm Category Description Text	ALM_C_TXT	Character	25	
3	Alarm Type	ALM_TYPE	Number	4	
4	Alarm Type Description Text	ALM_T_TXT	Character	25	
5	Device Number	NUMBER	Number	4	
6	Device Label	LABEL	Character	25	
7	Alarm Status	STATUS	Number	4	
8	Alarm Status Description Text	STATUS_TXT	Character	25	
9	Additional Comments	COMMENTS	Character	25	
10	Date the Alarm Occurred	DATE	Date	8	
11	Time the Alarm Occurred	TIME	Character	5	

**Table 10-2. Compliance Operational Table****Table Name:** COMPLY.DBF **Contents:** Stores All Compliance Events From The Remote Sites

ITEM	DESCRIPTION	FIELD	TYPE	SIZE	DEC
0	Site Identification Label	SITE_ID	Character	20	
1	Compliance Event Date	DATE	Date	8	
2	Compliance Event Time	TIME	Character	5	
3	Device Category Description	DEVICE_CAT	Character	25	
4	Device Number (if applicable)	NUMBER	Number	4	0
5	Device Location Label	LABEL	Character	25	
6	Report Type Description	REPORT	Character	25	
7	Status (if applicable)	STATUS	Number	4	0
8	Status Description Text	STATUS_TXT	Character	25	
9	Test Type (if applicable)	TEST_TYPE	Number	4	0
10	Test Type Description Text	TEST_TXT	Character	25	
11	Additional field for parameters or misc. text	FIELD_1	Character	30	
12	Additional field for parameters or misc. text	FIELD_2	Character	30	
13	Additional field for parameters or misc. text	FIELD_3	Character	30	
14	Additional field for parameters or misc. text	FIELD_4	Character	30	
15	Additional field for parameters or misc. text	FIELD_5	Character	30	
16	Additional field for parameters or misc. text	FIELD_6	Character	30	

**Table 10-3. Delivery Operational Table**

**Table Name:** DELIVERY.DBF **Contents:** Stores all Delivery events from the remote sites

ITEM	DESCRIPTION	FIELD	TYPE	SIZE	DEC
0	Site Identification Label	SITE_ID	Character	20	
1	Tank Number	NUMBER	Number	4	0
2	Product Code	PCODE	Character	2	
3	Tank Location Label	LABEL	Character	25	
4	Starting Date of Delivery	STRT_DATE	Date	8	
5	Starting Time of Delivery	STRT_TIME	Character	5	
6	Ending Date of Delivery	END_DATE	Date	8	
7	Ending Time of Delivery	END_TIME	Character	5	
8	Starting Volume	STRT_VOL	Number	6	0
9	Starting TC Volume	STRT_TCVOL	Number	6	0
10	Starting Water	STRT_WATER	Number	4	2
11	Starting Temp	STRT_TEMP	Number	5	2
12	Ending Volume	END_VOL	Number	6	0
13	Ending TC Volume	END_TCVOL	Number	6	0
14	Ending Water	END_WATER	Number	4	2
15	Ending Temp	END_TEMP	Number	5	2
16	Increase Volume	INCREASE_V	Number	5	2
17	Increase TC Volume	INCREASE_T	Number	5	2
18	Adjustment Factor	ADJUSTMENT	Number	5	2
19	Adjusted Increase Volume	ADJUSTED_I	Number	5	2
20	Adjusted TC Volume	ADJUSTED_T	Number	5	2

**Table 10-4. Inventory Operational Table**

**Table Name:** INVNTORY.DBF **Contents:** Stores All Inventory Events From The Remote Sites

ITEM	DESCRIPTION	FIELD	TYPE	SIZE	DEC
0	Site Identification Label	SITE_ID	Character	20	
1	Inventory Report Date	DATE	Date	8	
2	Inventory Report Time	TIME	Character	5	
3	Inventory Report Type	RPRT_TYPE	Character	20	
4	Tank Number	NUMBER	Number	4	0
5	Product Code	PCODE	Character	2	
6	Tank Location Label	LABEL	Character	25	
7	Volume	VOLUME	Number	6	0
8	TC Volume	TC_VOLUME	Number	6	0
9	Ullage	ULLAGE	Number	6	0
10	Height	HEIGHT	Number	5	2
11	Water	WATER	Number	4	2
12	Temperature	TEMPRATURE	Number	5	2
13	Water Volume	WATER_VOL	Number	5	2
14	Delivery Value	DELIVERY	Number	6	0

**Table 10-5. Auto Poll History Operational Table**

**Table name:** POLLHIST.DBF   **Contents:** Stores all Automatic Poll History events from the remote sites

ITEM	DESCRIPTION	FIELD	TYPE	SIZE	DEC
0	Site Identification Label	SITE_ID	Character	25	
1	Poll Date	DATE	Date	8	
2	Start Time	TIME_S	Character	5	
3	End Time	TIME_E	Character	2	
4	Command Diagnostics	CMD_D	Character	60	
5	Modem Diagnostics	MODEM_D	Character	60	
6	Command Being Executed When Event Occurred	CMD	Character	10	
7	Table Diagnostics	TABLE_D	Character	60	
8		COMMENT			

**Table 10-6. Power Outage Operational Table****Table name:** POWEROUT.DBF **Contents:** Stores All Power Outages That Occur

ITEM	DESCRIPTION	FIELD	TYPE	SIZE	DEC
0	Site Identification Label	SITE_ID	Character	20	
1	Tank Number	TAML_NUM	Number	2	
2	Power Removed Date	PW_REM_DAT	Date	8	
3	Power Removed Time	PW_REM_TIM	Character	5	
4	Power Restored Date	PW_REST_DA	Date	8	
5	Power Restored Time	PW_REST_TI	Character	5	
6	Power Removed Fuel Volume	PW_REM_FUE	Number	6	
7	Power Removed Water Volume	PW_REM_WAT	Number	6	
8	Power Removed Temperature	PW_REM_TEM	Number	6	
9	Power Restored Fuel Volume	PW_REST_FU	Number	6	
10	Power Restored Water Volume	PW_REST_WA	Number	6	
11	Power Restored Temperature	PW_REST_TE	Number	6	
12	Gross Change	GROSS_VOLU	Number	6	

**Table 10-7. Daily BIR Operational Table****Table name:** BIR\_DALY.DBF **Contents:** Stores All Daily Bir Events From The Remote Sites

ITEM	DESCRIPTION	FIELD	TYPE	SIZE	DEC
0	Site Identification Label	SITE_ID	Character	20	
1	Product Number	NUMBER	Number	4	0
2	Number of tanks mapped together	NUM_O_TNKS	Number	2	0
3	Tank Number	T1_NUM	Number	2	0
4	Tank Location Label	T1_LABEL	Character	20	
5	Tank Number	T2_NUM	Number	2	0
6	Tank Location Label	T2_LABEL	Character	20	
7	Tank Number	T3_NUM	Number	2	0
8	Tank Location Label	T3_LABEL	Character	20	
9	Tank Number	T4_NUM	Number	2	0
10	Tank Location Label	T4_LABEL	Character	20	
11	Tank Number	T5_NUM	Number	2	0
12	Tank Location Label	T5_LABEL	Character	20	
13	Opening Date	OPEN_DATE	Date	8	
14	Opening Time	OPEN_TIME	Character	5	
15	Closing Date	CLOSE_DATE	Date	8	
16	Closing Time	CLOSE_TIME	Character	5	
17	Probe measured inventory of previous day	PREV_INV	Number	6	0
18	Total of TLS adjusted deliveries	ADJ_DLVRYS	Number	6	0
19	Total of all metered sales	METR_SALES	Number	6	0
20	Manually entered adjustments	MAN_ADJ	Number	6	0
21	Calculated Inventory Volume	CALC_INV	Number	6	0
22	Probe Measured Inventory	CURRENT_INV	Number	6	0
23	Water Height	WATER_HT	Number	5	2
24	Variance	VARIANCE	Number	6	0



**Table 10-8. Periodic BIR Operational Table****Table Name:** BIR\_PER.DBF **Contents:** Stores All Periodic Bir Events From The Remote Sites

ITEM	DESCRIPTION	FIELD	TYPE	SIZE	DEC
0	Site Identification Label	SITE_ID	Character	20	
1	Product Number	NUMBER	Number	4	0
2	Number of tanks mapped together	NUM_O_TNKS	Number	2	0
3	Tank Number	T1_NUM	Number	2	0
4	Tank Location Label	T1_LABEL	Character	20	
5	Tank Number	T2_NUM	Number	2	0
6	Tank Location Label	T2_LABEL	Character	20	
7	Tank Number	T3_NUM	Number	2	0
8	Tank Location Label	T3_LABEL	Character	20	
9	Tank Number	T4_NUM	Number	2	0
10	Tank Location Label	T4_LABEL	Character	20	
11	Tank Number	T5_NUM	Number	2	0
12	Tank Location Label	T5_LABEL	Character	20	
13	Number of Days	DAYS	Number	3	0
14	Opening Date	OPEN_DATE	Date	8	
15	Opening Time	OPEN_TIME	Character	5	
16	Closing Date	CLOSE_DATE	Date	8	
17	Closing Time	CLOSE_TIME	Character	5	
18	Probe measured inventory of previous day	PREV_INV	Number	6	0
19	Total of TLS adjusted deliveries	ADJ_DLVRYS	Number	6	0
20	Total of all metered sales	METR_SALES	Number	6	0
21	Manually entered adjustments	MAN_ADJ	Number	6	0
22	Calculated Inventory Volume	CALC_INV	Number	6	0
23	Probe Measured Inventory	CURRENT_INV	Number	6	0
24	Water Height	WATER_HT	Number	5	2
25	Variance	VARIANCE	Number	6	0

**Table 10-9. Shift BIR Operational Table****Table name:** BIR\_SHFT.DBF **Contents:** Stores All Shift BIR Events From The Remote Sites

ITEM	DESCRIPTION	FIELD	TYPE	SIZE	DEC
0	Site Identification Label	SITE_ID	Character	20	
1	Product Number	NUMBER	Number	4	0
2	Number of tanks mapped together	NUM_O_TNKS	Number	2	0
3	Tank Number	T1_NUM	Number	2	0
4	Tank Location Label	T1_LABEL	Character	20	
5	Tank Number	T2_NUM	Number	2	0
6	Tank Location Label	T2_LABEL	Character	20	
7	Tank Number	T3_NUM	Number	2	0
8	Tank Location Label	T3_LABEL	Character	20	
9	Tank Number	T4_NUM	Number	2	0
10	Tank Location Label	T4_LABEL	Character	20	
11	Tank Number	T5_NUM	Number	2	0
12	Tank Location Label	T5_LABEL	Character	20	
13	Opening Date	OPEN_DATE	Date	8	
14	Opening Time	OPEN_TIME	Character	5	
15	Closing Date	CLOSE_DATE	Date	8	
16	Closing Time	CLOSE_TIME	Character	5	
17	Probe measured inventory of previous day	PREV_INV	Number	6	0
18	Total of TLS adjusted deliveries	ADJ_DLVRYS	Number	6	0
19	Total of all metered sales	METR_SALES	Number	6	0
20	Manually entered adjustments	MAN_ADJ	Number	6	0
21	Calculated Inventory Volume	CALC_INV	Number	6	0
22	Probe Measured Inventory	CURRENT_INV	Number	6	0
23	Water Height	WATER_HT	Number	5	2
24	Variance	VARIANCE	Number	6	0

# Glossary

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<b>ASC</b>	Authorized Service Contractor
<b>AST</b>	Aboveground Storage Tank
<b>asynchronous</b>	A mode of data transmission in which the time occurrence of the bits within each character or block of characters relates to a fixed time frame, but the start of each character or block of characters is not related to this fixed time frame.
<b>auxiliary port</b>	Output-only serial port used for remotely polling an additional console(s) through the first console.
<b>baud</b>	A unit of signaling speed equal to the number of discrete signal conditions or events per second. this refers to the physical symbols/second used within a transmission channel. For two devices to communicate they must be set to transmit/receive at the same baud rate.
<b>bit rate</b>	The speed at which data bits are transmitted over a communication path, usually expressed in bits per second. A 9600 bps terminal is a 2400 baud system with 4 bits/ baud.
<b>board</b>	A printed circuit board, such as the CPU and ECPU.
<b>Business Inventory Reconciliation (BIR)</b>	The process of reconciling product dispensed with product received (deliveries), and product remaining in the tank.
<b>CDIM (Current Loop Dispenser Interface Module)</b>	Installs in a communication port of TLS-350R. More than one CDIM can be installed. May be installed with any combination of other DIM types. CDIM has three 4-pin phone jack connectors and three green LEDs inside, under cover. The green LEDs indicate data transmitted to DIM from an external device. CDIM cannot transmit to an external device. Connects via 4-wire cable to Adapter Box. Adapter box converts target communication format to RS-422 format for CDIM. Adapter boxes are configured with two-wire flying leads, 25-pin "D" or nine-pin "D" T-cable connectors for various applications.
<b>CPU board</b>	Central Processing Unit printed circuit board
<b>chip</b>	Another term for an integrated circuit (see IC)
<b>coefficient of thermal expansion</b>	The amount of contraction or expansion of matter that will occur with temperature changes.
<b>communications</b>	Data transmissions between two or more pieces of equipment.
<b>component</b>	Any resistor, capacitor, IC, etc., soldered onto a printed circuit board
<b>configuration</b>	Relative arrangement of parts of a system.
<b>containment sump</b>	An enclosure used to contain submersible pumps and related piping to prevent the release of product into the environment.
<b>data</b>	Information collected by the console.
<b>default parameter setting</b>	System set-up parameter that is preset by the factory.

<b>diagnostics</b>	Indicators of the current conditions in the system.
<b>differentiating</b>	See discriminating.
<b>discriminating</b>	Also referred to as differentiating. A sensor that can distinguish between fuel and water.
<b>dispenser</b>	Dispenses fuel through a nozzle, typically to a motor vehicle.
<b>dispenser pan</b>	An enclosure used to contain dispenser piping to prevent release of product into the environment.
<b>double wall tank (DW tank)</b>	A tank with a secondary wall to prevent leakage of product into the environment.
<b>E<sup>2</sup> chip</b>	Another name for an Erasable Programmable Read Only Memory chip (see EEPROM).
<b>ECPU board</b>	Enhanced Central Processing Unit printed circuit board
<b>EDIM (Electronic Dispenser Interface Module)</b>	Installs in a communication port of TLS-350R. More than one EDIM can be installed. May be installed with any combination of other DIM types. EDIM has one 25-pin “D” connector outside of the port and a red and green LED inside, under cover: Red - DIM transmits to external device; Green - external device transmits to DIM.
<b>EEPROM</b>	Erasable Programmable Read Only Memory (see E <sup>2</sup> chip).
<b>external output</b>	Field wiring locations where devices can be connected to the system, such as overfill alarms and warning lights.
<b>float switch</b>	A sensing device in which a float is used to signal the presence of a liquid.
<b>groundwater</b>	Water within the earth that supplies wells and springs.
<b>H8 chip</b>	A microcomputer IC on the ECPU board used for module control and communication.
<b>hydrostatic sensor</b>	A sensor used to monitor liquid-filled, double-walled tanks, such as brine-filled tanks.
<b>IC</b>	Integrated Circuit; refers to circuits, such as microprocessors, which are etched on single crystals, ceramics or other semiconductor layers and hermetically sealed.
<b>inventory</b>	How much product you have remaining.
<b>interstitial</b>	Relates to the interstice, a space or gap between the walls of a double-wall tank. Also referred to as annulus.
<b>intrinsically safe</b>	A circuit in which any spark or thermal effect is incapable of causing ignition of combustible material.
<b>LAN</b>	Local Area Network; a data-only communication network between data terminals using a standard interface to the network.
<b>LDIM</b>	Lan connected Dispenser Interface Module.
<b>magnetostriction</b>	The change in the dimensions of a ferromagnetic body caused by a change in its state of magnetization.

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## Glossary

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<b>MDIM</b>	Mechanical Dispenser Interface Module
<b>modem</b>	MOdulator-DEModulator; a unit that modulates and demodulates digital information from a terminal or computer port to an analog carrier signal for passage over an analog line.
<b>module</b>	An electronic component that plugs into the console to perform a special function.
<b>NEC</b>	National Electrical Code; a nationally accepted guide for the safe installation of electrical conductors and equipment.
<b>NFPA</b>	National Fire Protection Association; a nonprofit organization dedicated to protecting lives and property from the hazards of fire. NFPA publishes over 270 nationally recognized codes and standards, including the National Electrical Code.
<b>PLLD</b>	Pressurized Line Leak Detection.
<b>PROM</b>	Programmable Read Only Memory
<b>probe</b>	A device used to measure temperature and product and water levels in a tank, and transmit that data to the console.
<b>RAM</b>	Random Access Memory
<b>ROM</b>	Read Only Memory
<b>sensor</b>	A device that responds to a physical stimulus (e.g., pressure, magnetism, or a particular motion) and transmits a resulting impulse (as for measurement or operating a control).
<b>surface-mount board</b>	A printed circuit board which has component leads soldered on its surface (face).
<b>through-hole mount board</b>	A printed circuit board which has component leads going through holes in the board for soldering on the back side.
<b>tri-state sensors</b>	Tri-state sensors are piping sump sensors and steel and glass reinforced plastic tank interstitial sensors. The three conditions of this sensor are normal, fuel alarm, or sensor out.
<b>Ullage</b>	Amount of empty space in a tank
<b>95% Ullage</b>	Amount of product required to fill a tank to 95% of capacity.
<b>UST</b>	Underground Storage Tank
<b>VLLD</b>	Volumetric Line Leak Detection
<b>vapor</b>	A substance in the gaseous state as distinguished from the liquid or solid state.
<b>volumetric</b>	A method of detecting leaks in pressurized piping.
<b>WPLLD</b>	Wireless Pressurized Line Leak Detection.





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577013-342, Revision C