Westronic

PC-Wesmaint

994-T010 Rev. J February, 2011

Technical Manual

Technical Manual

Westronic Systems, Inc.
a Mediation Technology company

NOTICE

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REGULATORY INFORMATION

WARNING: This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the installation manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15, Subpart J of the FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of the equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

CAUTION: Changes or modifications not expressly approved by Westronic could void the user's authority to operate this equipment.

The FCC label can be found on the right side of the shelf assembly. The label includes the following information:

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

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Revision History

Rev Level	Issue Date	Reason for Reissue
A	–	First Release
B	June, 1991	–
C	October, 1995	New Format
D	November, 1996	5-1/4 inch Disks Removed
E	July, 1997	TABS Database Conversion Software Added
F	February, 2000	Logo Update, New Format, Error Correction
G	October, 2000	Logo Update
H	March, 2004	Address update
I	June, 2005	Updated address and fax
J	February, 2011	Updated address and fax

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Section 1 Description and Installation

1.1 Description

Westronic PC-Wesmaint uses a PC operating in a DOS environment to provide a Wesmaint interface. Besides the Wesmaint function, PC-Wesmaint software retrieves, views, and downloads WS2000 E-Telemetry and TABS remote configuration information.

The software Wesmaint function is compatible with Westronic WS2000 E-Telemetry, TABS, TBOS, and MCS-11 remotes.

E-Telemetry Units

The configuration upload/download features are compatible with certain E-Telemetry master remotes. Units capable of using these features have plugins with the following part numbers:

- 500-2001 Rev B and later revisions
- 500-2002 Rev B
- 500-2003 Rev B
- 500-2005 Rev B

TABS Units

PC-Wesmaint includes a TABS database conversion utility to make older version TABS databases (databases created with software versions below Rev G) compatible with software version 569-T060 Rev G.

Wesmaint Package

The PC-Wesmaint package consists of the following items:

- PC-Wesmaint program on a single 3-1/2 inch, 1.44-MB floppy disk
- TABS database conversion software
- Wesmaint cable
- DB9-to-DB25 adapter
- Technical Manual

The PC-Wesmaint performs the following functions:

- Wesmaint
  The Wesmaint function uses a PC as the I/O device to simulate the standard Wesmaint interface.

- Upload
  The upload function retrieves the configuration stored in an E-Telemetry remote EEPROM and stores it in a binary file (*filename*.cfg). After uploading, PC-Wesmaint converts the binary file into two text files. The first file describes the port, slave, and display configuration (*filename*.lic) while the second text file (*filename*.lip) describes all the process lists.

  The upload function can also retrieve a TABS configuration. However, the upload generates a single file (*filename*.cfg) and does not generate text files.

- Download
  The download function downloads a binary configuration file (*filename*.cfg) to an E-Telemetry remote. Downloading allows restoring an E-Telemetry remote configuration from a PC file. The same binary file can configure multiple remotes.

  The download function replaces an the existing database in a TABS WS2000.

- File Utilities
  The file utilities function allows you to convert binary configuration files (*filename*.cfg) to descriptive text files (*filename*.lic and *filename*.lip), view and print text files, and delete files.

1.2 Installation

A single 3-1/2 inch, 1.44-MB floppy disk stores the PC-Wesmaint program. To prevent damage to the disk, do not operate PC-Wesmaint from the original disk. Instead, install the software on the PC hard drive or copy it to a backup floppy disk before operating PC-Wesmaint.

According to the Westronic License Agreement, you can operate this software on only one PC at a time.

Note: The PC-Wesmaint software has controls to detect copyright violations.

1.2.1 Floppy Disk Installation

If you plan to operate the PC-Wesmaint software from a floppy disk, use the DOS program DISKCOPY to make a copy of the original disk. Label the copy of the PC-Wesmaint disk.

1.2.2 Hard Disk Installation

If you plan to operate the PC-Wesmaint software from a hard disk drive, perform the following installation procedure:

1. Verify that the hard drive is at the root directory (for example, the drive is at C:, not C:*somename*).
2. Insert the original floppy disk in Drive A and change your computer to Drive A (`CD: A`).

   If you use another floppy drive instead of Drive A, make certain that you use the correct drive (`CD: X`).
3. Enter `INSTALL C:` to install the software on hard drive C.

   If you install the software onto another hard drive instead of Drive C, use the hard drive name in the command line (`INSTALL D:`).

   The INSTALL command creates a \WESMAINT subdirectory on your hard drive and installs the PC-Wesmaint program file in it.
4. Copy the \DBUPGRAD directory on the Wesmaint disk to the \WESMAINT directory on the hard drive in the event you need to convert TABS databases.

1.2.3 Connecting the WS2000

PC-Wesmaint operation requires the Wesmaint cable and, possibly, the DE9-to-DB25 adapter. Perform the following procedure to connect the PC to the WS2000:

1. Connect the Wesmaint cable to the PC COM1 or COM2 port. If the PC has a 25-pin COM port, use the DE9-to-DB25 converter between the Wesmaint cable and the COM port.
2. Plug the Wesmaint cable 25-pin connector to the WS2000 front-panel Wesmaint port (JB3).
3. If the installation requires an extension cable, use a standard RS-232 cable between the Wesmaint cable and the WS2000.

Important: Disconnect the Wesmaint cable when applying/removing power to the WS2000.

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Section 2 Operation

2.1 Starting The Program

You must connect the Wesmaint cable to the PC and the WS2000 to operate the PC-Wesmaint program.

1. Enter `WESMAINT` at the c:\wesmaint prompt or, to start it from a different directory, enter the DOS path to the WESMAINT directory in front of the WESMAINT command (`c:\WESMAINT WESMAINT`).
   When the program starts, the following question appears.

   `WS2000 on COM(1) or COM(2) ?`

2. Enter `1` if you are operating PC-Wesmaint over the PC COM1 port (the default) or enter `2` if you are using the COM2 port.
   The main menu (Figure 2-1) appears .

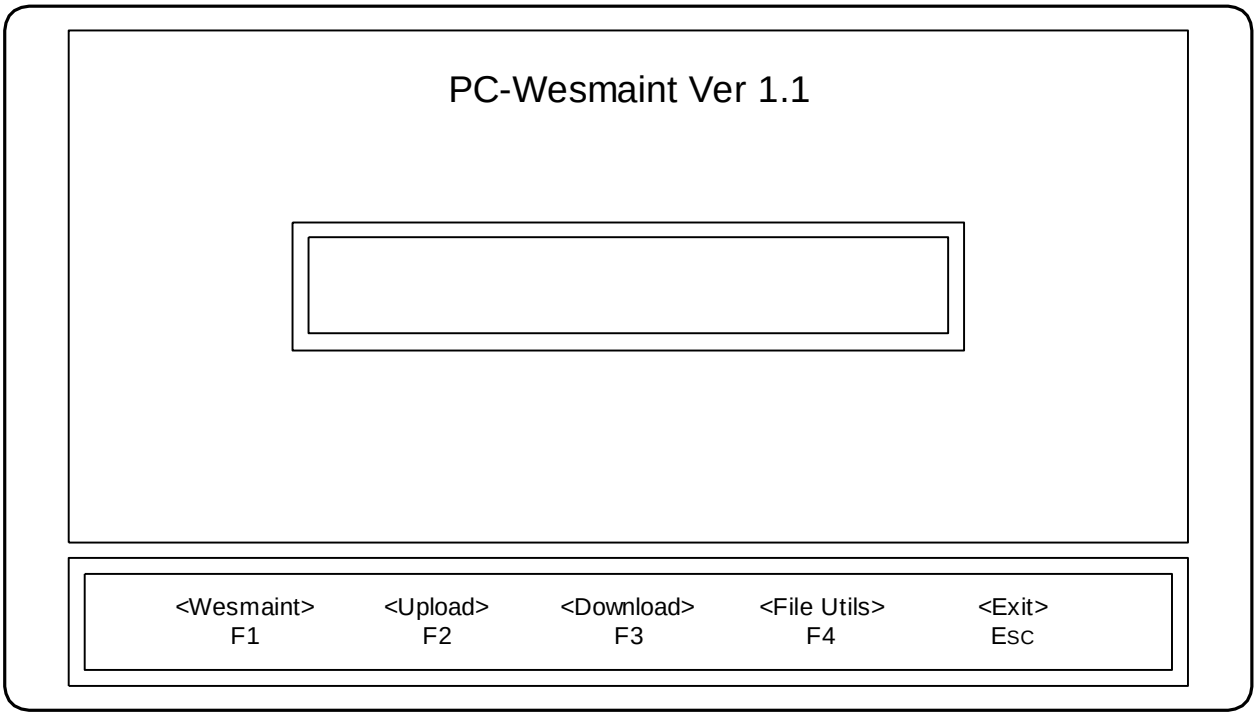

Figure 2-1 PC-Wesmaint Main Menu

2.2 Wesmaint Function

The Wesmaint function provides a compatible Westronic Wesmaint user interface using a PC. For Wesmaint operating details, refer to the *Maintenance Interface* section of the WS2000 Technical Manual.

The **PC Wesmaint** window consists of two displays and a list of key maps at the window bottom. **Wesmaint Display** shows the standard Wesmaint messages described in the *Maintenance Interface* section of the WS2000 Technical Manual. The function name of the pressed PC-Wesmaint key displays in **Wesmaint Key**. For example, when you press F2, **Wesmaint Key** displays **COMMAND**. Figure 2-2 shows the **PC Wesmaint** window.

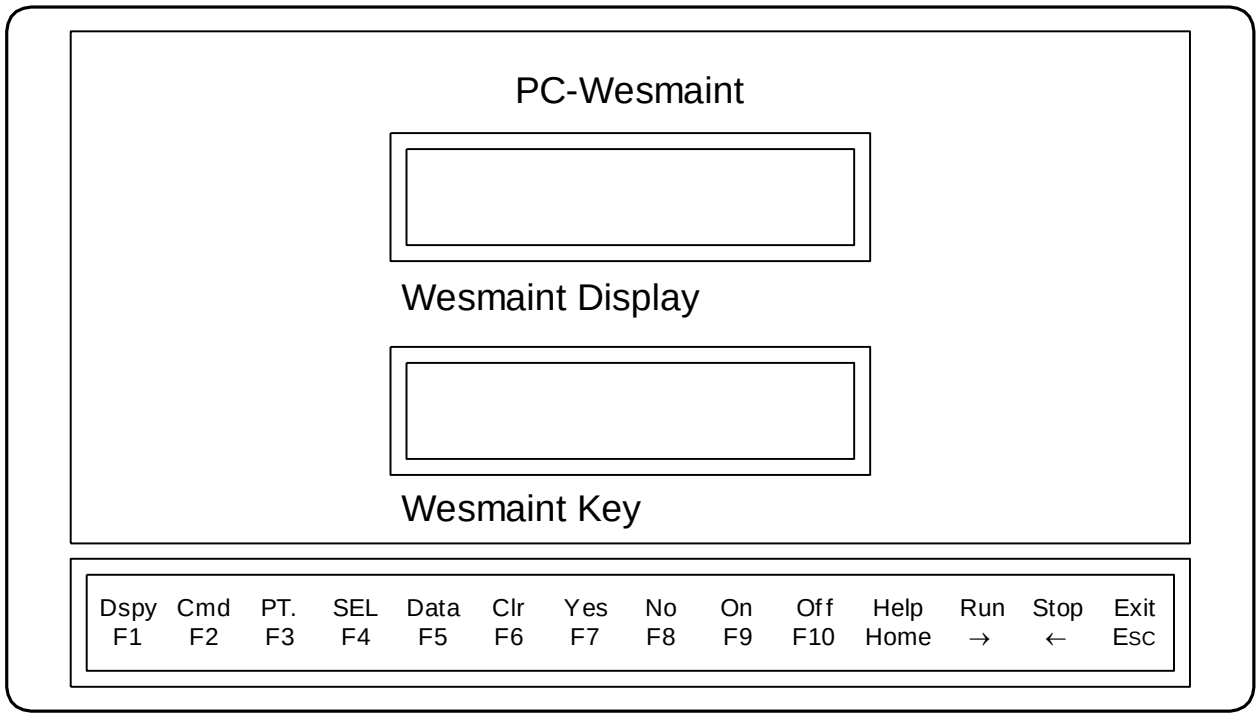

Figure 2-2 PC Wesmaint Window

ESC returns you to the startup menu.

The bottom of the window displays keys mapped to correspond to Wesmaint keys (for example, F1 – F10, Home, Right Arrow and Left Arrow). The standard PC keyboard keys enter 0 – 9 and A – F for Wesmaint data input. (The standard PC keys enter the characters A to R for Wesmaint data input when using PC-Wesmaint with an MCS-11 remote.) The keyboard Up and Down arrows perform the same function as the Wesmaint Up and Down arrows.

Figure 2-3 shows a standard Wesmaint unit. The parentheses indicate the PC-Wesmaint key that serves the same function as a Wesmaint key.

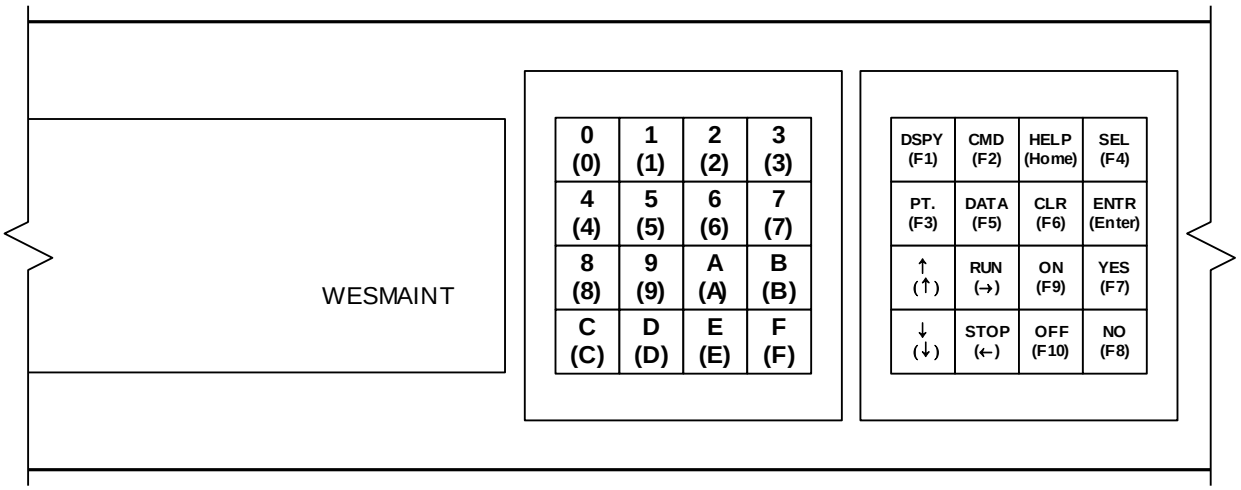

Figure 2-3 Standard Wesmaint Front Panel

2.3 Upload Function

The Upload function retrieves E-Telemetry and TABS databases to the PC-Wesmaint program. The Upload function for E-Telemetry is currently compatible only with the WS2000 E-Telemetry remotes listed on Page 1-1.

The Upload function retrieves a WS2000 configuration and stores it in a binary file with a .cfg file extension. At the end of the upload process, the Upload function converts an E-Telemetry file into two files. The first file (*filename*.lic) describes the unit configuration. The second file (*filename*.lip) describes the process lists.

Press ESC to return the main menu (if not there already), then press F2 to enter the Upload function. The program prompts for a filename (for example, REM000) in which to store the WS2000 configuration information. Because the program automatically appends the .cfg extension to the file, it does not accept any file extensions that you enter. Figure 2-4 shows the **Upload Display**.

The Upload function verifies the uploaded data and, if an error occurs during data transmission, increments the **Error Count** display while making another upload attempt on that data block. The program aborts the WS2000 upload after detecting an excessive amount of transmission errors.

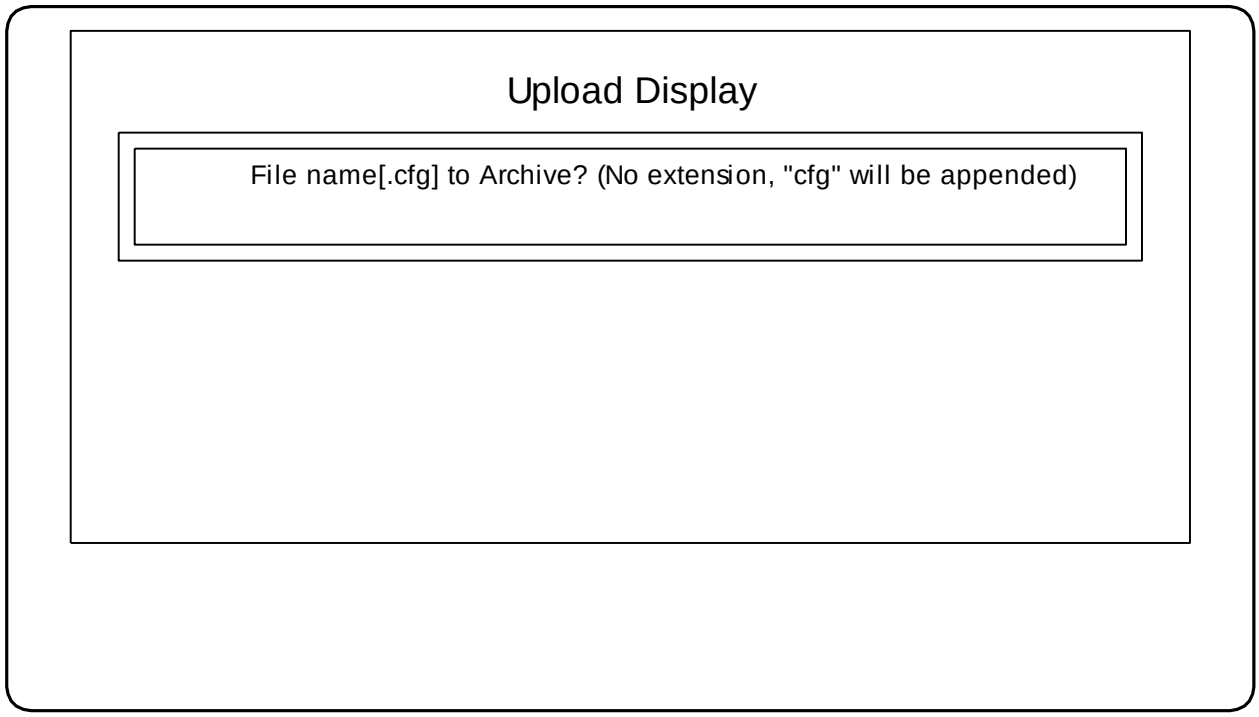

Figure 2-4 Upload Display

2.4 Download Function

The Download function allows you to program an E-Telemetry or a TABS WS2000 remote from a previously uploaded *filename*.cfg binary file (see *Upload Function*). The Download function for E-Telemetry is currently compatible only with the WS2000 E-Telemetry remotes listed on Page 1-1.

Press ESC to return the main menu (if not there already), then press F3 to enter the Download function. The program prompts you to select a filename (for example, REM003) from a list of already uploaded binary configuration files. Figure 2-5 shows an example list of binary files from which to choose in the **Download Display**.

To select a file, use the Up/Down arrow keys to move the selection bar to the desired download file and press ENTER. After you have selected a filename, the Download function first establishes a communication link, then downloads 64 data blocks. The **Download Display** changes, as shown in Figure 2-6.

Block Num displays the block number during the download. After data transfer has completed, the Download function waits a maximum of 1-1/2 minutes for the WS2000 to write the data to EEPROM. While waiting, the Download function displays **`Writing EEprom`**. When

writing to the EEPROM has completed, the Download function displays **`Download Complete`** and returns to the main menu.

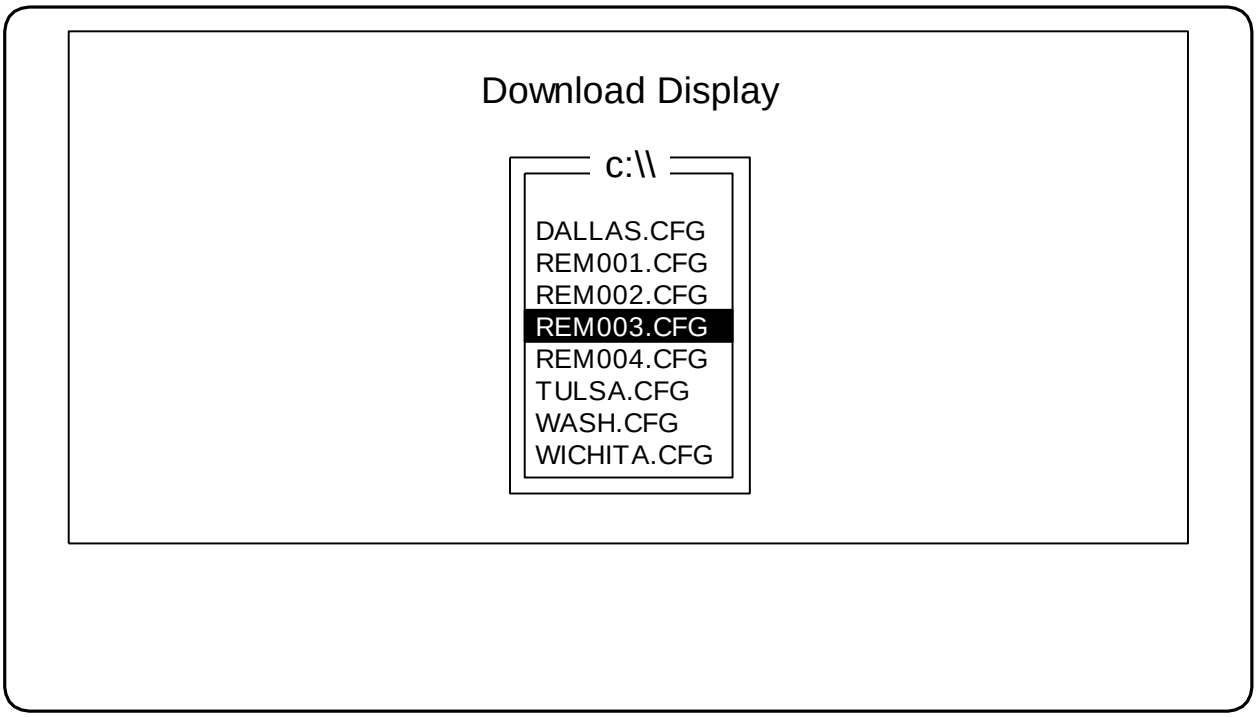

Figure 2-5 Download Display File Selection List

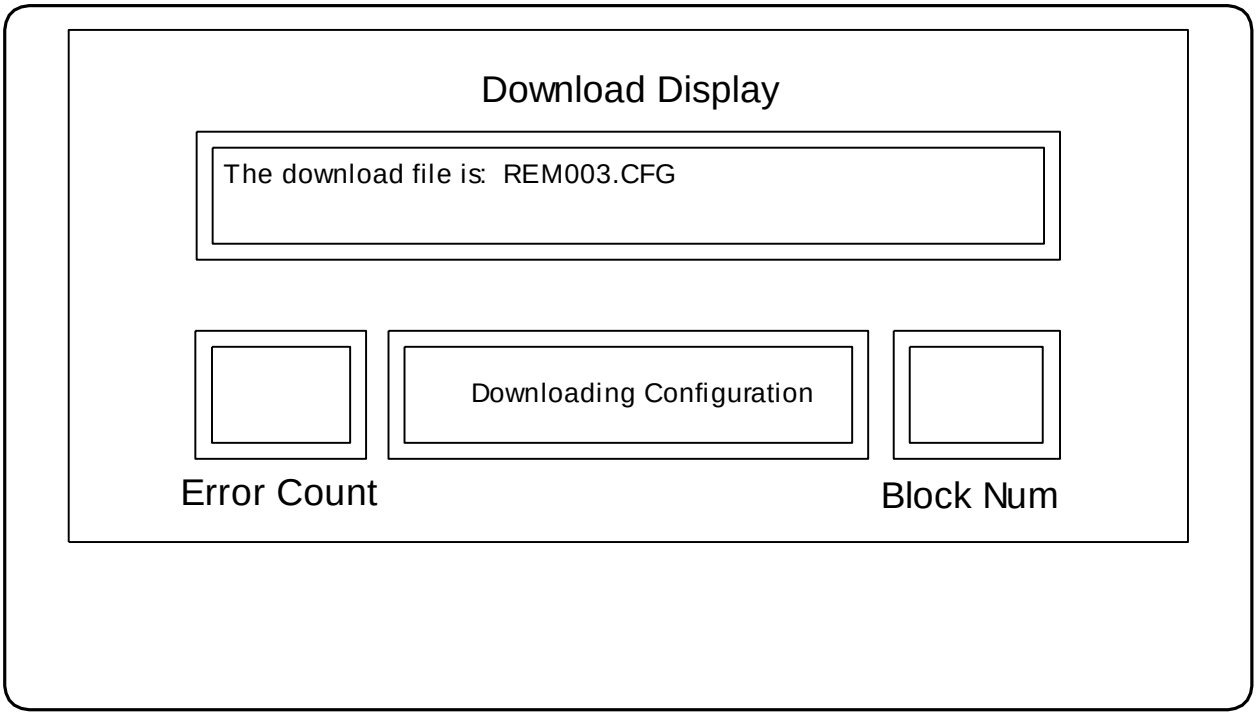

Figure 2-6 Download Display Window

The Download function verifies the downloaded data and, if an error occurs during data transmission, increments the **Error Count** display while making another download attempt on that data block. The program aborts the WS2000 download after detecting an excessive amount of transmission errors.

2.5 File Utilities

The File Utilities function provides a means of converting, viewing, printing, and deleting E-Telemetry database files. The Delete File function is also available for TABS database files.

Press ESC to return the main menu (if not there already), then press F4 to enter the File Utilities function. The **File Utilities** window (Figure 2-7) appears with a number of file options listed at the window bottom.

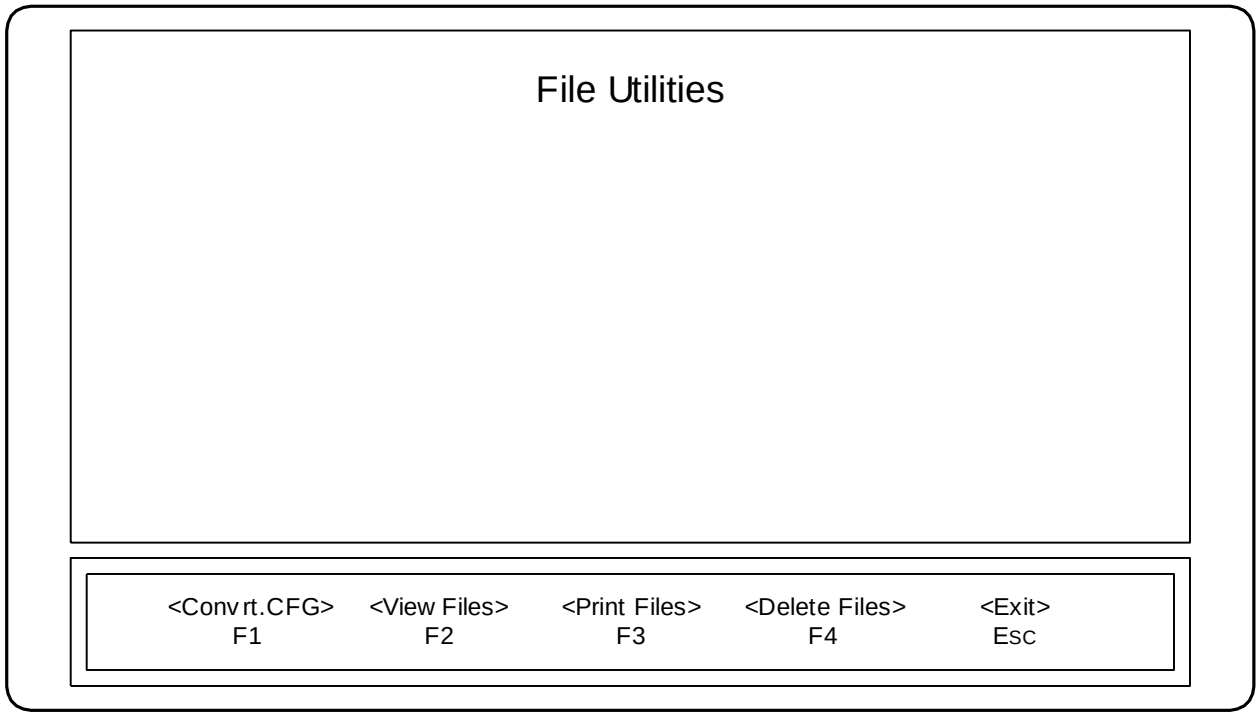

Figure 2-7 File Utilities Window

2.5.1 Convert File

After uploading has completed, the Upload function automatically converts E-Telemetry database files into *filename*.lic and *filename*.lip text files for viewing and printing. The File Conversion function proves useful for converting previously uploaded database files in the event that *filename*.lic and *filename*.lip files have been deleted from the upload directory.

To select a file for conversion, press F1 while in the **File Utilities** window to obtain a list of database files. Use the Up/Down arrow to move the selection bar to the desired file and press ENTER. Figure 2-8 shows the **File Utilities** window with a list of files to select from for conversion.

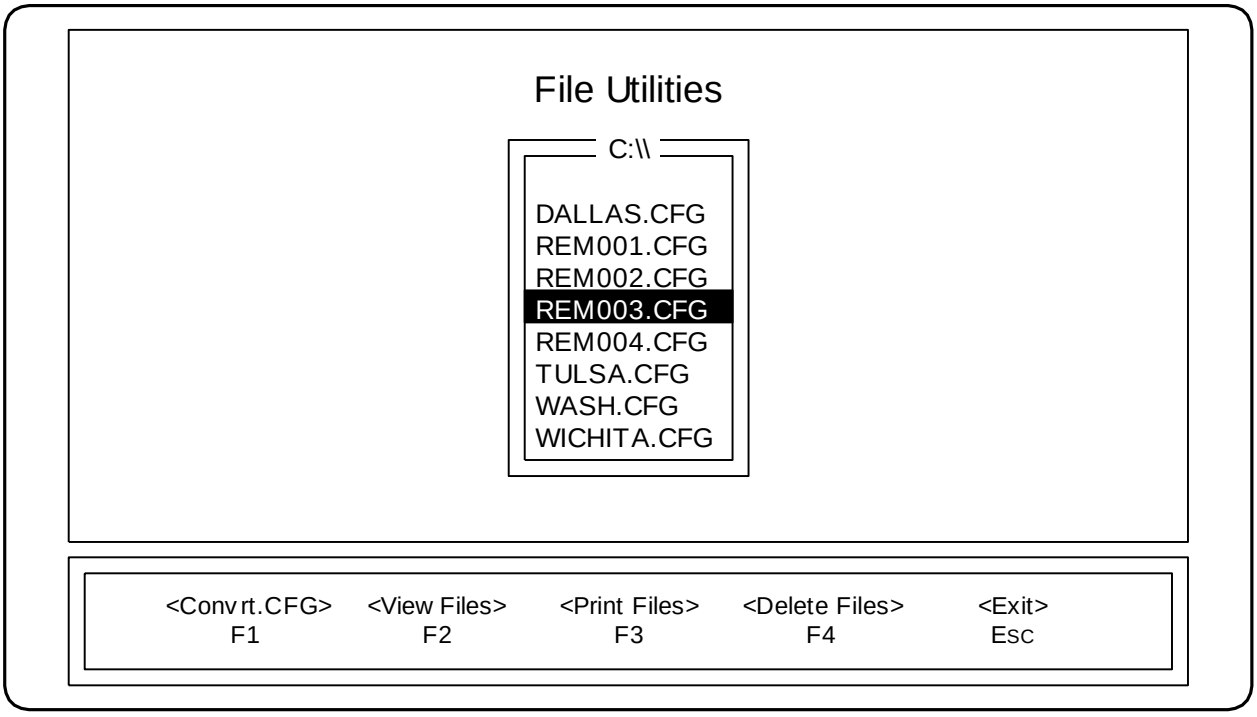

Figure 2-8 Convert Files Selection List

2.5.2 View Files

The View Files function allows you to select a text file for viewing. Press F2 while in the **File Utilities** window, select the desired configuration or process list from the file list that appears, and press ENTER. Files ending in .lic describe the remote configuration and files ending in .lip describe the process lists.

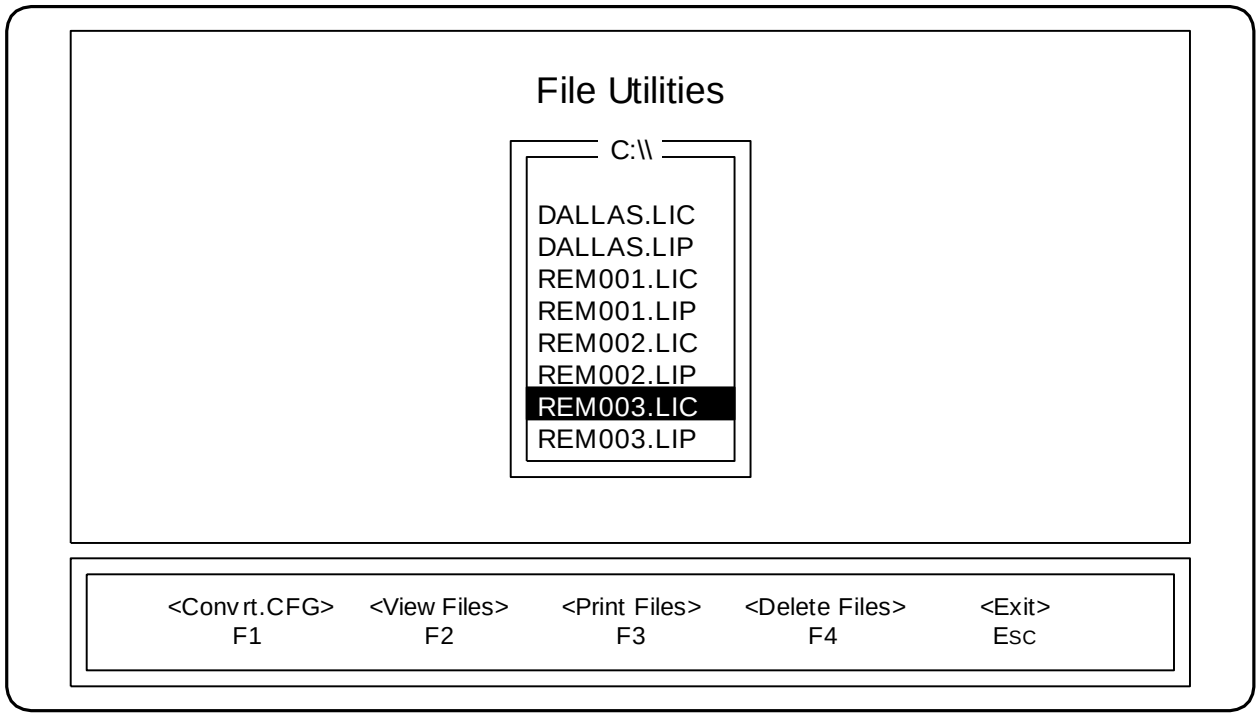

Figure 2-9 View Files Selection List

Figure 2-10 shows an example view of a file as it appears after selection.

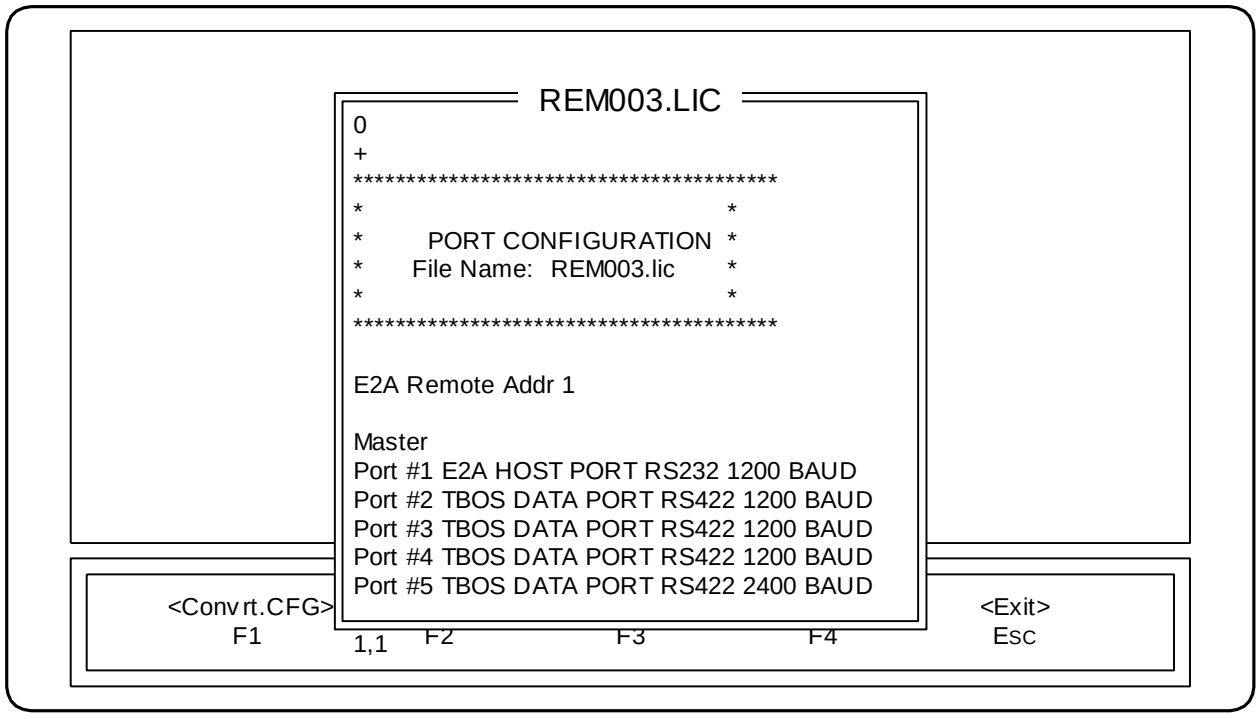

Figure 2-10 View Files Display

The numbers below the lower left corner of the window indicate the cursor position (row, column) in the file. Use the following keys to control the file-browsing window:

ESC	Exit from the file browser. The **Are You Sure (Y/N)?** prompt appears. Enter Y to exit or N to remain in the browser.
→	Move cursor one column to the right.
←	Move cursor one column to the left.
CTRL+→	Move cursor to the next word on the right.
CTRL+←	Move cursor to the previous word on the left.
↑	Move cursor up one row.
↓	Move cursor down one row.
PAGE UP	Scroll up one page in the display window.
PAGE DOWN	Scroll down one page in the display window.
HOME	Move cursor to the first column in the current row.
END	Move cursor one character past the last column in the current row.
CTRL-HOME	Move cursor to the first column and row of the first page.
CTRL-END	Move cursor to the last column and row of the last page.
ENTER	Move cursor to the next row.
ALT-F	Find a string in the file after the current cursor position. Because the search is case sensitive, you must enter the exact string. For example, entering PORT #7 to search for Port # 7 does not work. After finding the string, the program prompts **Search for more (Y/N)?** to allow finding multiple occurrences of the string.

2.5.3 Print Files

The Print Files function allows you to print a text file. Press F3 while in the **File Utilities** window, select the desired configuration (.lic) or process list (.lip) from the file list that appears, and press ENTER. The printer must be attached to LPT1 and be a standard parallel printer. The **Print** display is the same as the **View Files** display.

2.5.4 Delete Files

The Delete Files function allows you to delete any file in the directory. Press F4 while in the **File Utilities** window, use the Up/Down arrows to highlight the file to delete, and press ENTER. The program prompts **`Are you sure you want to delete this file?`** along with the filename. To delete the file, press Y. Press any other key to not delete the file. The Delete Files function displays all the files in the directory.

Important: Do not delete wesmaint.exe or any required .cfg files.

2.6 TABS Database Conversion

You can upgrade a TABS database written by PC-Wesmaint software versions below 569-T060 Rev G to make them compatible with 569-T060 Rev G software. You must first upload the database (see *Upload Function* on Page 2-3) from a WS2000 that currently uses pre-Rev G software. Use the following procedure to convert the database. After database conversion, you can download the database to a WS2000 that uses Rev G software only.

The TABS Database Conversion utility runs separately from the PC-Wesmaint application. Exit PC-Wesmaint and change directories to c:\wesmaint\dbupgrad. At the prompt, enter `WS2000UP` *`olddb`*`.cfg` *`newdb`*`.cfg`, where *`olddb`*`.cfg` is the name of the old database uploaded by PC-Wesmaint and *`newdb`*`.cfg` is the name of the new converted database.

Note: The new database can have the same name as the old database, but this results in the loss of the old database. The new database is compatible with Rev G software only. Download the new database as described in *Download Function* on Page 2-4.

2.7 Communication Failures

If PC-Wesmaint fails to establish communication with the WS2000, select the Wesmaint function (press F1 while in the main menu) to verify communication. If the unit is communicating, attempt the failed function again. If communication still is not established, check the cable connections. If the cable connections are correct and the unit is not communicating, wait 30 seconds before making another communications attempt. The WS2000 has data-rate-adaption features that reset the Wesmaint port to the default Wesmaint communication setup after not receiving characters for 30 seconds. If all this fails, exit the PC-Wesmaint program and restart the application (*Starting The Program* on Page 2-1).

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