



## *Read Me First*

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This document describes the serial port diagnostic and configuration utilities that are available for the TL89X product family.

Refer to the FILELIST.TXT file for a complete listing of all files included on the diskette.

### **ADDITIONAL ITEMS REQUIRED:**

- Computer running Windows 95 or Windows NT (i386) w/serial port (COMx) available.
- EGA Monitor Extension Cable or equivalent - 9 PIN (DB9) Male-Female (no twists)

### **INSTALLATION INSTRUCTIONS:**

1. Copy the contents of the TL89X Serial diagnostics diskette or CD to a working directory on the host computer.
2. Connect the DB9 serial cable between the computer and the library serial port. For standalone libraries, connect to the female DB9 connector on the rear panel of the unit. For multi-module systems, connect to the female DB9 connector on the rear panel of the TL890 module.
3. Screen saver utilities and laptop power saver features should be disabled while using the utilities.

**OVERVIEW OF DIAGNOSTIC AND CONFIGURATION UTILITIES:**

The serial port diagnostic and configuration utilities can be used for the following tasks:

- Update the firmware in the library.
- Retrieve the diagnostic trace information in the library.
- Restore the Compaq default configuration settings to NOVRAM.

**STARTING THE SERIAL PORT UTILITY:**

1. Open a Command Prompt on the host computer.
2. Change to the directory where you copied the diagnostics diskette.
3. Type MENU and press ENTER. The following screen will appear:

Serial Port Utility Menu

- A. Update Firmware
- B. Get Diagnostic Trace
- C. Restore Default Configuration
- Q. Quit

Select A, B, C, or Q and press ENTER:

The following sections outline the procedures for running the three utilities.

**RUNNING THE UPDATE FIRMWARE UTILITY:**

Prior to performing a firmware update, you should copy the firmware image file to the current directory on the host computer.

To perform a firmware update, choose A (Update Firmware) from the menu and follow the prompts:

You will be asked to specify the COM port to use on the host computer and to provide the filename of the firmware image file.

After you have supplied this information, you will see the following screen:

1. Ensure the Serial Cable is connected between the Library and Host.
2. Scroll to FLASH UPDATE in the Maintenance Menu of the Library.
3. Press ENTER at the Library to start the Host Sync.
4. Then press any key on the keyboard to start the firmware update.

The unit should synchronize with the COM port and the firmware load should start after a few moments.

If it fails to synchronize in about 30 seconds, the routine will time out without updating. The unit will display Fault Code: F004 Host Sync Failed and the program will time-out and display Error: Can't sync with DLT Library target. Press ENTER on the unit to clear the fault code.

Check that the correct COM port is selected, the cable is connected properly and that the unit baud rate and the command line baud rate match. Repeat the Update firmware procedure from the menu.

After sync occurs, the new firmware will be loaded. The sectors will be copied and then the unit will reboot automatically. It will take several minutes to load the firmware.

If the wrong firmware PROM image is used (i.e., 256KB PROM image rather than the 512KB PROM image), the unit will indicate Fault Code: F006 Incompatible Image and the program will display Target Flash Device: [PROM type] and Error: Image size does not match target device size. Press ENTER on the unit to clear the fault code and repeat steps 6 and 7 with the correct PROM image file named in the /F parameter.

**CAUTION:** DO NOT INTERRUPT the firmware load procedure or the flash firmware may be unusable.

In multi-module systems, when the global system reboots, it will detect that the slave modules are at a different firmware version and will flash all the attached slave modules to the same firmware level through the serial communication link to each slave.

**RUNNING THE GET DIAGNOSTIC TRACE UTILITY:**

To retrieve a diagnostic trace from the library, choose B (Get Diagnostic Trace) from the menu and follow the prompts. You will be asked to specify the COM port to use on the host computer and whether you are tracing a standalone library or a multi-module system. After you have supplied this information, you will be prompted to start the trace retrieval.

For standalone libraries, a trace binary file named ut.bin will be saved to the current directory.

For multi-module systems, several trace binary files will be saved (ut.bin, ut1.bin, ut2.bin, etc.) depending on how many modules are connected to the Global controller.

**RUNNING THE RESTORE DEFAULT CONFIGURATION UTILITY:**

Normally, any configuration parameters are set using the front panel configuration menu on the library. However, it is possible to restore the default configuration parameters (while preserving the existing library serial number) using the Restore Default Configuration Utility.

To restore the default configuration parameters, choose C (Restore Default Configuration) from the menu and follow the prompts to specify the COM port. After the utility has successfully restored the default parameters, you will be prompted to power cycle the library or reboot the module to allow all new values to take effect. You will also be warned to verify all SCSI ID settings before connecting the library to the host system(s).

**QUITTING THE SERIAL PORT UTILITIES:**

When you have completed the diagnostic and configuration tasks, you can quit the Serial Port Utility menu by typing Q and pressing ENTER from any prompt. This will return to the standard Command Prompt. To close the Command Prompt, type EXIT and press ENTER. Disconnect the DB9 serial cable from the library and the COM port of the host computer.

TL89X Serial Port Diagnostic and Configuration Utilities Version 1.0

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