Parameter Storage Board User's Manual

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1.0 GENERAL

The Parameter Storage Board is an accessory for the IBM 9420 and 9430 UV/Vis spectrophotometers. It permits storage of the baseline correction data and the operating parameters for Methods 1 through 6, including the data for the calibration curve from Method 4. With this accessory, up to 5 sets of parameters can be retained even when the spectrophotometer power is turned off.

2.0 UNPACKING AND INSTALLATION

a) Upon unpacking, verify that the DIP switches on the board are in the arrow directions shown in Figure 2-1. If they are not, remove the cover of the DIP switch assembly and set them as shown. (Numbers 1 and 3 are in "UP" or ON position. All others are in the "DOWN" or OFF position.)

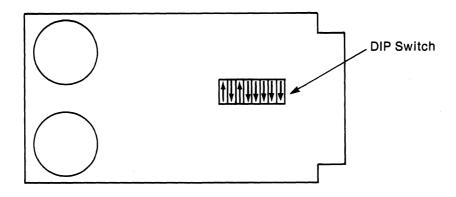


Figure 2-1. Parameter Storage Board

- b) Remove one of the slot covers at the rear of the 9420/9430 Operator Unit.
- c) Insert the Parameter Storage board into the slot, as shown in Figure 2-2. Push the board in fully until it is seated in the connector at the back of the slot.
- d) Replace the slot cover removed in step b.

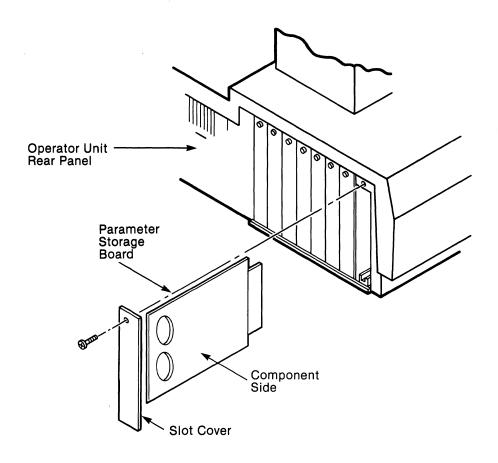


Figure 2-2. Installation of the Parameter Storage Board

3.0 OPERATING PROCEDURE

3.1 POWER-UP SEQUENCE AND INITIAL BASELINE ACQUISITION

3.1.1 Automatic Initialization Sequence with the Parameter Storage Board

Upon turning the power on, the spectrophotometer undergoes initialization as described in the 9420/9430 User's Manual. Baseline correction data are not acquired. Instead, these data are obtained from the non-volatile memory of the Parameter Storage Board. Consequently, initialization is completed in about 7 minutes. As always, the countdown begins at 17 minutes, but jumps from approximately 12:45 to 2:45 minutes.

Note: When the Parameter Storage Board is first installed, it contains data used in the inspection test before shipment from the factory. For valid baseline data, the User must reacquire baseline correction data following the procedure in Section 3.1.2 below.

3.1.2 Acquiring Baseline Correction Data

This must be done when the Parameter Storage Board is first installed or whenever baseline data needs to be updated.

Press the following keys to place the instrument in Method 53:

METHOD 5 3 ENTER

Baseline correction data are then acquired and automatically stored in the Parameter Storage Board through the following keystrokes:

2 2 ENTER

3.2 STORING, RECALLING AND CLEARING PARAMETERS

There are five files for storing parameters. Each file can store all conditions for a single Method (1 to 6), including the data for the

calibration curve from Method 4. The Method at the time of storing is also registered. When a file is recalled, the instrument will automatically return to that Method.

Note: Files must not be recalled in Method 0. Recalling a file in Method 0 will erase the file.

3.2.1 Parameter File Storage

The unshaded keys shown in Figure 3.1 are used with the Parameter Storage Board. Also, highlighted in the figure are the "Cursor" and "F" keys used for Parameter File operations.

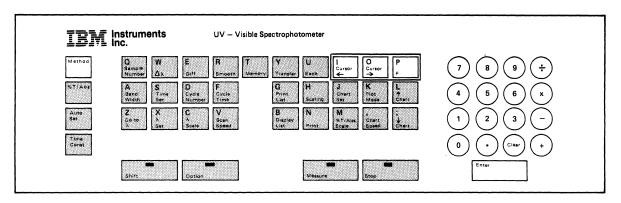


FIGURE 3.1 Spectrophotometer keys used with the Parameter Storage Board.

Enter the Method whose parameters are to be stored. Set all the parameters to the desired values. To store the parameters press the following keys:

$$F (M) \rightarrow ENTER$$

where F is the function accompanying the letter "P" of the typewriter keyboard, M is the file number (1 to 5), and " \rightarrow " is the "Cursor-right arrow" key.

3.2.2 Recalling Parameter Files

To recall a file for Methods 1 through 6, press the following keys:

where "+" is the "Cursor-left arrow" key.

- Note: (a) When F is pressed, a window for entering a numeral appears at the bottom of the CRT and disappears after the entry of the numeral is completed.
 - (b) M must be an integer between 1 and 5.
 - (c) If an attempt is made to recall an empty file or store data in a full file, the error message E201 is displayed on the CRT window.

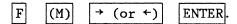
 To clear the error and resume control of the instrument, press the STOP key.
 - (d) Auto Set is automatically activated.

3.2.3 Providing a Modified Set of Initial Instrument Parameters

The instrument parameter values stored in File 1 are the values the instrument will use immediately after the POWER switch is turned ON. If no data are stored in File 1, the usual preset parameter values are used (see the 9420/9430 User's Manual for details).

3.2.4 Clearing File Contents

Clearing is done in Method O. To erase a file, enter Method O by pressing the $\overline{\text{METHOD}}$, $\overline{\text{O}}$ and $\overline{\text{ENTER}}$ keys and then press the following sequence of keys:



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