

INSTALLATION & OPERATION MANUAL

SP824-INT SP824 Printer Programmer

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LIQUID CONTROLS SPONSLE, INC.

FLOW MEASURING DEVICES AND CONTROLS

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SPECIFICATIONS

Temperature:	Operating –0 to 85°C Storage –10 to 125°C
Input Voltage:	9VAC via attached 120VAC transformer
Interface:	RS-232C 25-pin Sub-D connector (female) Any version of MS-DOS
Features:	Change printed details on any SP824 printer
Enclosure:	Weight 1.0 lbs.

The SP824-INT is an interface allowing field programming of any SP824 printer.

The software included in the SP824-INT is designed to run on any IBM-PC compatible computer running any version of MS-DOS past version 5.0. Through a system of simple to use menus, the user can configure any of over 20 different parameters on the printer, as well as load and save ticket layouts. Options for print a sample ticket, print a summary of tickets, clear all stored tickets, and save all tickets to disk are also available.

Connection and Use

Required Equipment:

Standard IBM-PC Compatible (desktop or laptop) (COMM 1 must be available)
Serial cable w/ proper ends (one end must be 25 pin male)
Source of 120VAC
SP824 Printer

Test Procedure:

1. Connect SP824-INT to the PC via the serial cable. Note, the SP824-INT must be connected to the PC's COMM1 port.
2. Connect the SP824-CUBE to the SP824-INT (the connector is keyed).
3. Connect the transformer to AC power.
4. Turn on and boot the PC. MS-DOS operating system is preferred, however, versions of MS-Windows 9X have been tested and work fine.
5. After the boot process is complete, insert the 3-1/2" floppy disk into drive A:. If MS-DOS is used, skip to step 6. If MS-Windows is used, click on "START" and select "Run". Type in the following: a:\sp824rp2f.exe and press Enter. Skip to step 7.
6. Type the following at the command prompt: a:\824rp2f.exe and press Enter.
7. A main menu will be displayed (SCR 1). If the main menu does not display, check all connections and try again. Remember that you must be connected to COMM 1 and have no other devices connected to COMM 1.
8. Insert the SP824-CUBE into the printer with the red round window pointed inwards toward the printer.
9. Turn the printer on. Note: The printer will automatically turn itself off after 2 minutes of inactivity. The printer may be turned back on by turning the power switch on the printer off and then back on. The printer must be on during all of the following communications.
10. The following pages describe each screen and the input expected.

Main Menu:

After completing the above steps, the following will be displayed:

Model SP824 configuration utility, USER Version V03-1; 23-SEP-96 rk

824 Configuration options:

- 1 - View/edit printer parameters
- 2 - View/edit user definable messages
- 3 - Print sample ticket on printer
- 4 - Print ticket summary on printer
- 5 - Save ticket summary to disk file
- 6 - Erase stored tickets
- X - Exit program to DOS

Option #?

- 1) View/edit printer parameters - Use this option to change the following parameters:
→ Printer's time - Print darkness - TOF sensor threshold - Ticket copies to print - Digits to right of DP. - Unit of measure message - Daylight savings compensation - Temperature units - Top Of Form skew steps.
→ See Page 5.
- 2) View/edit user definable messages - Use this option to load, save, or change the user definable messages.
→ See Page 7.
- 3) Print sample ticket on printer - Use this option to print a sample ticket on the SP824.
- 4) Print ticket summary on printer - Use this option to print a ticket summary on the SP824.
- 5) Save ticket summary to disk file - Use this option to save a ticket summary on a disk in the computer.
- 6) Erase stored tickets - Use this option to erase all stored tickets on the printer.

X) Exit program to DOS - Use this option to exit the program and return to the operating system.

Parameters Menu:

Use option 1) on the main menu to gain access to the following menu.

Model SP824 configuration utility, USER Version V03-1; 23-SEP-96 rk

EPROM version EXEC: 824TC01-V02-4 (MB20STD)
Tickets in storage ... 7

- 1 - Printer's time 08:12 21-Jul-00
- 2 - Print darkness 128
- 3 - TOF sensor threshold . 105
- 4 - Spare
- 5 - Spare
- 6 - Ticket copies to print 1
- 7 - Digits to right of DP. 0
- 8 - Unit of measure message KI LOGRAMOS
- 9 - Daylight savings comp. Y
- A - Temperature units C
- B - Top Of Form skew steps 10
- C - Weighmaster (more info)

Enter field to change?

Press ESC to return to previous menu

(Note: The Enter key is not required after entering data unless a data field is not completely filled:)

- 1) **Printer's time** - Use this option to change the time and date of the internal clock. Data must be entered using a 24 hour clock and follow the example above.
- 2) **Print darkness** - Use this option to change the intensity of the printed ticket. Values above 155 are not recommended. Higher values can degrade the life of the print head as well as shorten battery life. Valid values are 0 – 255.
- 3) **TOF sensor threshold** - Use this option to change the brightness of the Top of Form sensor uses to determine a valid top of form. This value is factory set to 105 and should not be adjusted. Valid values are positive.
- 4) Not available in User version.
- 5) Not available in User version.
- 6) **Ticket copies to print** - Use this option to change the number of tickets to be printed when the print button is pressed. Valid values are 1-3.
- 7) **Digits to right of DP** - Use this option to set the placement of the decimal point. This does not change the calibration factor, it only changes where the decimal point is printed. Valid values are 0 – 4.
- 8) **Unit of measure message** - Use this option to change the printed units of measure. This does not change the calibration factor, it only changes what is displayed. Valid values are standard keyboard characters and numbers.
- 9) **Daylight savings comp. Y** - Use this option to cause the printer to automatically compensate for daylight savings time.
- A) **Temperature units** - Use this option to change the printed units for the temperature. This does not change the calibration factor, it does however, automatically convert the displayed temperature for the desired units. Valid values are F, C, and K, representing Fahrenheit, Celsius, and Kelvin respectively.
- B) **Top Of Form skew steps** - Use this option to change where the SP824 thinks the Top of Form is in reference to the black bar on the ticket. This value is factory set to 10 and should not be adjusted. Valid values are positive.
- C) **Weighmaster (more info)** - Use this option to change Weighmaster information. This option is only available on a few very specialized printers.

Press the Escape key to return to the main menu.

User Definable Messages:

Use option 2) on the main menu to gain access to the following menu.

Mdel SP824 configuration utility, USER Version V03-1; 23-SEP-96 rk

User definable messages - top of ticket

- 0- Delivery receipt from
- 1- SPONSLER COMPANY INC
- 2- 2363 SANDIFER BOULEVARD
- 3- WESTMINSTER, SC 29693
- 4- phone (864) 647-2065 fax (864) 647-1255
- 5- <http://www.sponsler.com>
- 6- USA

User definable messages - bottom of ticket

- 7- Thank you for choosing Sponsler Company
- 8- The measure of excellence in Precision Turbine Flowmeters and Controls
- 9- Have a great day!

Load, Save messages to disk or enter field # to change [L, S, 0-9]?

Press ESC to return to previous menu

Each field in this menu is configurable as to the size, alignment, and content of the text displayed on each ticket. To change the text on a line, press the number of that line as shown on the display. A prompt will appear asking for the new text:

Enter new message line #0

F1- NARROW F2- STANDARD F3- W DE F5- LEFT F6- CENTER F7-
RI GHT

Decide on alignment and size and press the appropriate function key to apply the change. Changing the size of the text will also change the number of characters allowed for that line. The number of characters allowed is indicated by the prompt line's length. Enter the new text for that line and press <Enter>.

After all changes have been made, pressing 'S' will save the changes to disk. A prompt will appear asking for the filename:

Ent er out put f i l e n a m e ?

Enter a name for the file and press <Enter>. The file will be saved to the current default directory (This should be the floppy disk). If the save was successful, the following confirmation will be displayed:

F i l e s a v e d t o d i s k P r e s s a n y k e y t o c o n t i n u e . . .

After saving the changes, they may be loaded into any printer by simply inserting the cube into a printer and selecting option 'L' from this screen. Upon selecting option 'L', a prompt appears allowing the name of the input file to be entered. Type the name used above during the save and press <Enter>. The information in the file will be sent to the printer.

Press the Escape key to return to the main menu.