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High-Performance
M-84PRO

Quick Guide

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Accessories & Options

PCMCIA Memory Expansion
One slot for PCMCIA Memory Card (up to 4 MB SRAM or 16 MB Flash ROM). Can be used for graphic file storage, print buffer expansion, format storage and downloaded fonts.

Flash ROM Expansion
Internal 4MB Flash ROM PCB

Real Time Clock
An internal Date/Time clock that can be used to date/time stamp labels at the time of printing.

Label Dispenser
Internally mounted attachment allowing labels to be peeled from backing for immediate (on demand) applications. Backing not rewound.

Label Rewinder
External Option that rewinds onto a roll after they are printed.

Label Cutter
An attachment allowing labels to be cut at specified intervals. Controlled through programming.

Coax/Twinax Interface
Coax/Twinax Plug-In Interface module. Coax interface emulates an IBM 3287-2 printer with a standard Type A BNC connector. Twinax interface emulates IBM 5224, 5225, 5226 or 4214 printers with auto-terminate/cable through capabilities.

Parallel Interface
IEEE1284 Bi-Directional Plug-In Interface Module.

Serial Interface
High Speed RS232 Plug-In Interface Module.

USB Interface
Universal Serial Bus Plug-In Interface Module.

Ethernet Interface
10/100 BaseT Plug-In Interface Module.

Printer Overview

The SATO M-84PRO Thermal Transfer Printers are complete, high-performance on-site labelling systems. All printer parameters are user programmable using the front panel controls and the DIP switches. All popular bar codes and 14 human-readable fonts, including a vector font and two raster fonts, are resident in memory and thus providing a variety of available fonts.

The Operator's Manual will help you understand the basic operations of the printer such as setup, installation, configuration, cleaning and maintenance.

The M-84PRO can print labels up to four inches wide and is available in three resolutions; 203 dpi, 305 dpi, 609 dpi. The resolution is determined by the print head that is installed in the printer and can be changed in the field simply by installing the desired print head. The printer automatically detects the resolution of the print head and loads the appropriate controlling firmware.

The M-84PRO uses the standard SBPL. The only differences between it and other RISC printers are the allowable values representing the print positions on the label. These values are specified in "dots" and will vary depending on the resolution of the printer and the amount of memory available for imaging the label. The allowable range for the various M-84PRO models is specified in a table in the "*e*" and *PRO Printer Programming Reference*.

Table of Contents

Physical

SPECIFICATION	M-84PRO All Models
PHYSICAL	
Width	10.4 in. (265 mm)
Depth	17.1 in. (435 mm)
Height	13.4 in. (341 mm)
Weight	39.7 lb. (18.0Kg)
POWER	
Input Voltage	115/220 VAC +/-10%, 50/60 Hz +/-1%
Power Consumption	130 W Operating, 24W Idle
ENVIRONMENTAL	
Operating Temperature	41º to 104º F (5º to 40º C)
Storage Temperature	23º to 140º F (-5º to 60º C)
Storage Humidity	30 to 90% RH Non-Condensing
Operating Humidity	30 to 80% RH Non-Condensing
Electrostatic Discharge	8KV
REGULATORY APPROVALS	
Safety	VCCI (Class B), UL, CUL, CE, FCC (Class B)
RFI/EMI	FCC (Class B)

PRINT-OUTS	
Vector Fonts	Proportional or Fixed Spacing Font Size 50 x 50 dots to 999 x 999 dots Helvetica, 10 Font Variations
Rotation	0º , 90º , 180º , and 270º Rotation
Graphics	Dot addressable, SATO Hex/Binary, BMP or PCX formats

SPECIFICATION	M-84PRO All Models
CONTROLS AND INDICATORS	
Power	Green LED
On-Line	Green LED
Label	Red LED
Ribbon	Red LED
Error	Red LED
LCD Panel	2 Line x 16 Character
Label Feed	Front Panel
Power On/Off Switch	Front Panel
POTENTIOMETER ADJUSTMENTS	
Print Darkness	Front Panel
Offset	Front Panel
Pitch	Font Panel
Display	Front Panel
INTERFACE CONNECTIONS	
Parallel	IEEE1284 Standard
Serial	RS232C (9600 to 57600 bps) Standard RS422/485 (9600 to 57600 bps) Optional Ready/Busy or X-On/X-Off Flow Control Bi-directional Status
Universal Serial Bus	USB Ver. 1.1 Standard
Ethernet	10/100 BaseT
PROCESSING	
CPU	32 Bit RISC
Flash ROM	2 MB
SDRAM	16 MB
Receive Buffer	2.95 MB
Memory Expansion	See Options and Accessories

Installation

Remove the M-84PRO from the packing container. Check to make sure you have the following:
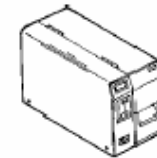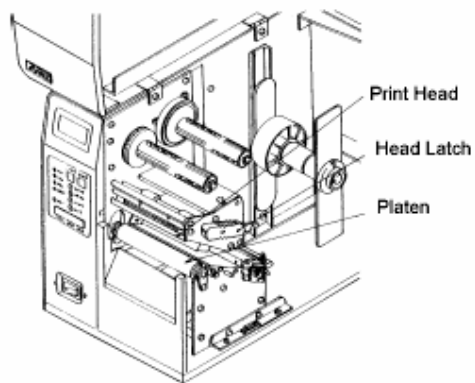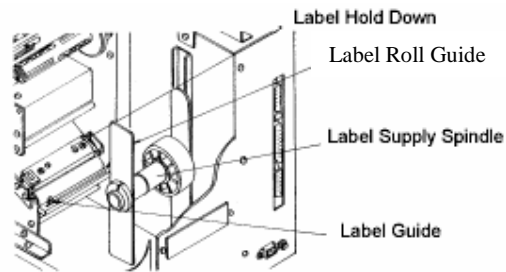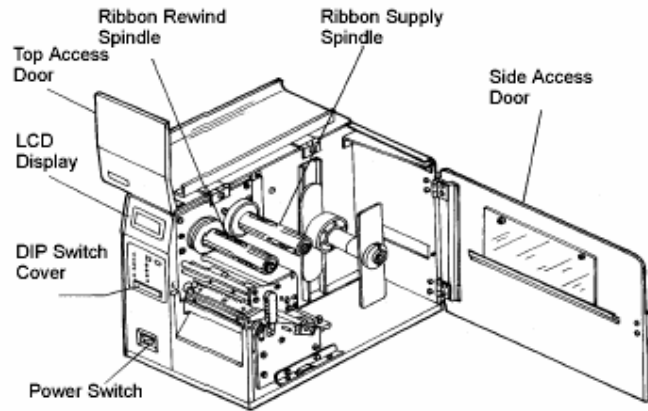

Printer

Power Cord

Quick Guide

CD-ROM

Careful consideration must be given when selecting the location of the printer, especially to environmental considerations. To obtain optimum results from M-84PRO, always try to avoid operation locations influenced by:

- Direct or bright sunlight, as this will make the label sensor less responsive and may cause the label to be sensed incorrectly.
- Locations which have extreme temperature, as this can create electrical problems on the circuits within the printer.
- The installed location of the printer should ideally be in areas free from dust, humidity and sudden vibrations.

Consumables

Always use SATO carbon ribbons and labels or equivalent in the thermal transfer models. The use of incorrect materials may cause malfunctions of the printer and void the printer warranty.

Components

M-84PRO Specifications

General Printer Specifications

SPECIFICATION	M-84PRO-2	M-84PRO-3	M-84PRO-6
PRINT			
Method	Direct or Thermal Transfer		
Speed (User Selectable)	2 to 10 ips 50 to 250 mm/s	2 to 8 ips 50 to 200 mm/s	2 to 6 ips 50 to 150 mm/s
Print Module (Dot Size)	.0049 in. .125 mm	.0033 in. .083 mm	.0017 in. .042 mm
Resolution	203 dpi 8 d/mm	305 dpi 12 d/mm	609 dpi 24 d/mm
Maximum Print Width	4.1 in. 104 mm		
Maximum Print Length	49.2 in. 1249 mm	32.8 in. 835 mm	14.0 in. 356 mm
MEDIA			
Minimum Width	.87 in. (22 mm)		
Minimum Length Continuous Tear-Off Cutter Dispense	0.24 in. (6 mm) 0.63 in. (16 mm) 1.18 in. (30 mm) 1.18 in. (30 mm)		
Maximum Width	5.0 in. 125 mm		
Type	Roll or Fan-Fold Die Cut Labels Thermally Sensitive		
Maximum Caliper	0.008 in. 0.21 mm		
Roll OD (max) Face-In	8.6 in. 220 mm		
Core ID (min)	3 in. 76.2 mm		
SENSING			
See-Thru	Movable		
Reflective Eye-mark	Movable		
Continuous Form	Sensor Not Used		
RIBBON			
Maximum Width	4.4 in. (111 mm)		
Length (max)	1475 ft. (450 mm)		
Thickness	4.5 micron, Wound Face-In		

Error Blinks	Ribbon End	3 Short	Ribbon End	1. Needs new ribbon roll 2. Ribbon sensor needs adjustment
	Download Error R/W Error Mem Full Error	3 Short	Download Error	1. Read/Write error 2. Corrupted download file 3. Download file too large
	CopyCard/ Format R/W Error No Card Error Mem Full Error	3 Short	Card Copy or Format Error	1. R/W error during copying 2. Card not installed properly 3. File too large
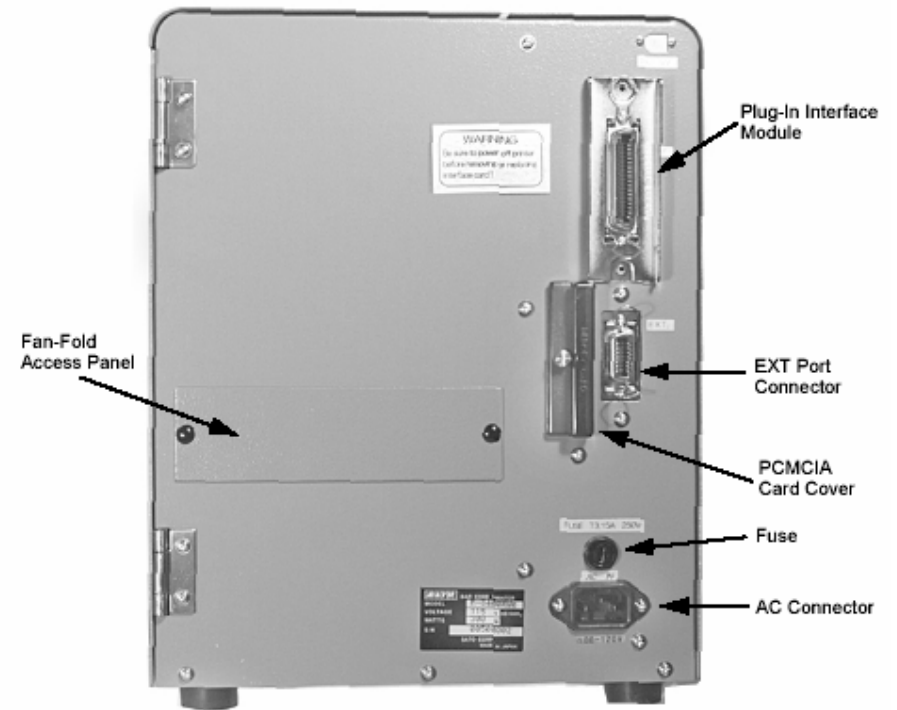
| AC Input	Input 100-120/200-240 VAC, 50/60 Hz connector. Use cable provided.
AC Fuse	Input power protection. 3/1.5A rating.
Interface Slot	Connector for Plug-In Interface Module.
Memory Card Slot	Connector for optional PCMCIA Memory Card.
EXT	External signal connector, AMP 57-60140.

Media Loading

Label Stock Loading

1. Open the Top Access Door by swinging it up and to the left. Open the Side Access Door by swinging it to rear of the printer.
2. Open the Print Head Assembly by pushing the Head Latch towards the rear of the printer. The Print Head Assembly is spring-loaded and will automatically open as soon as the Head Latch is disengaged.
3. Loosen the Label Edge Guide and push it to the outside of the printer to give the maximum label width.
4. Remove the Label Roll Guide.
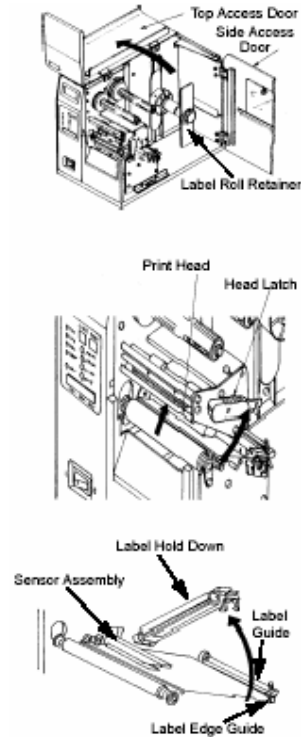
ERROR Signals

| LED	LCD Message	Audible Beep	Error Condition	Possible Causes
Error On	Machine Error	1 Long	Machine Error	1. Defective Board
Error On	EEPROM Error	1 Long	EEPROM Read/Write	1. EEPROM not installed correctly 2. Overwriting EEPROM
Error On	Head Error	1 Long	Head	1. Electrical head malfunction
Error On	Sensor Error	3 Short	Sensor	1. Paper jam 2. Sensor DSW setting 3. Sensor level adjustment
Error Blinks	Card R/W Error	1 Long	Memory Card Read/Write	1. Card not formatted 2. No card recognized
Error Blinks	Card Low Battery	1 Long	Memory card Battery Low	1. Card battery needs adjustment
Error Blinks	Card No Battery	1 Long	No Battery in Card	1. Card needs battery installed
Errors Blinks	Head Open	3 Short	Head Open	1. Head not latched 2. Head latch switch bad
Error Blinks	Cutter Error	3 Short	Cutter	1. Cutter jam 2. Cutter sensor dirty
Error On Line Blinks	Parity Error	3 Short	RS232 Parity Error	1. RS232 parameter mismatch
Error On Line Blinks	Overrun Error	3 Short	RS232 Overrun Error	1. RS232 parameter mismatch
Error On Line Blinks	Framing Error	3 Short	RS232 Framing Error	1. RS232 parameter
Error On Line Blinks	Buffer Over	3 Short	Buffer Overflow	1. Command stream exceeds buffer size
Error Blinks	Paper End	3 Short	Media End	1. No Paper 2. Paper incorrectly loaded

Intermittent Problems
If the print server and the printer start up OK, but you intermittently have problems printing, check the following:

1. Excessive NetWare polling can be a big cause of intermittent problems. Make sure that you have only enabled the NetWare file servers that you need for printing (do a SHOW NETWARE command from the print server console to see the enabled file servers). If you have V3.21 or earlier firmware, make sure that NetWare polling is disabled by using the console command SET NETWARE RANGE 0. If you are not using NetWare, you can disable NetWare entirely with the command SET NETWARE DISABLED.

2. Check the individual protocol troubleshooting sections provided with the Ethernet Plug-In Interface Module for additional causes of intermittent printer problems.

5. If using roll labels (or tags), load the roll onto the Label Supply Spindle so that the printing side of the label faces upwards as it unwinds from the roll. The labels should be wound *face-in*. Push the roll all the way to the inside of the printer and push Label Roll Guide snugly against the outside of the label roll.

6. If using fanfold labels (or tags), set them on a flat surface behind the printer. Pass the labels (printing side up) through the slot in the rear of the printer.

7. Make sure the labels are routed under the Label Guide and through the Sensor Assembly.

8. Open the Label Hold-Down by squeezing the green tab and the release tab together. The Label Hold Down is spring loaded and will open automatically when the latch is disengaged. Feed the labels under the Label Guide, under the Label Hold Down, through the Sensor Assembly and out of the front of the printer.

9. Inspect the label routing and verify that the path matches that illustrated in the Label Loading diagram. Set the Adjustable Label Guide to keep the labels against the inside of the printer.

10. Close the Label Hold-Down by pushing downward on the green tab until it latches closed.
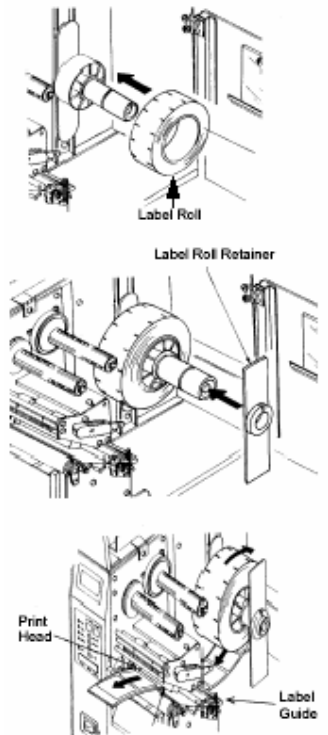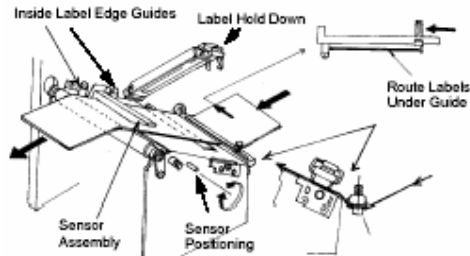
11. Adjust the outside Label Edge Guide until it touches the outside edge of the label and tighten the thumb screw. Make sure the labels are also touching the inside edge guides.

CAUTION: Using media narrower than the maximum print width may cause excess head wear due to the label edge.

12. If the ribbon is already loaded, close the Print Head by rotating the black Head Latch towards the front of the printer until it latches closed.
13. If the ribbon is not loaded, see the following descriptions for loading instructions.
14. Close both the Access Doors.
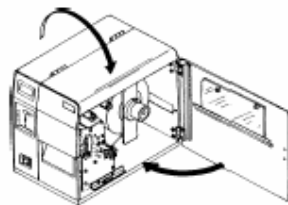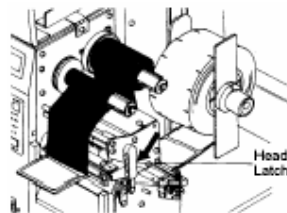
Checking the Interface between the Print Server and the Printer
First make sure that the cable between the print server and the printer is securely plugged in at both sides. Then:

1. Wait about two minutes after the printer is powered on and then run a printer self-test.

   If the self-test does not print, then there is a possibility that it is a hardware problem. Double check the connections.

   In some rare instances, disabling NBUF with the command SET PORT P1 NBUF DISABLED will solve port compatibility issues.

Checking the Network Connection and Cabling
If the self-test page prints but you cannot print documents, first check network connection and cabling.

1. If you are connecting to a 10baseT network, verify that the OK LED is on. If the appropriate LEDS are not on, there is probably a bad 10BaseT or 100BaseT cable or the hub port is bad. If possible, try a different cable and hub port, or try connecting a different device (such as a PC) to the cable.
2. If you are using a repeater or hub, make sure that SQE (heartbeat) is turned off at the hub (that is the default setting for most hubs). Also, if you have a hub or multiport repeater, verify that the hub or repeater is good by trying the print server on a different port.
3. If you have a bridge or router located between the print server and the host computer, make sure that the device is set up to allow the print server to send and receive data from the host. For example, a bridge can be set up to only allow certain types of Ethernet addresses to pass through (a process known as filtering); therefore, such a bridge must be configured to allow print server addresses. Likewise a router can be set up to pass only certain protocols, so be sure that the desired protocol can be passed to the print server. In the case of routers, also make sure that the protocol is routable (LAT, NetBEUI and DLC/LLC are not routable).
4. Make sure that you are not trying to perform an illegal operation, such as attempting to print a label larger than the printer can handle.
5. Check the individual protocol troubleshooting sections provided with the Ethernet Interface Module for additional causes of intermittent printer problems.

6. If you are still unable to get printer output, try the Hex Dump as described in Step 5 under the Parallel Interface troubleshooting. In this case, the printer monitors the RS232C interface for incoming data.
7. From the Hex Dump, if you are seeing extra 0DH 0AH (CR and LF) characters, and are using BASIC, refer to *PRO Printer Programming Reference*. It provides hints for writing a SATO program in BASIC.

Using the Universal Serial Bus (USB) Interface
If nothing prints when doing a test print you will need to verify that the device drivers have been successfully installed by doing the following:

1. Click on Start, then Settings and then Control Panel.
2. Within the new Window you should have an Icon listed as System. Double Click on this.
3. Click on the Device Manager tab.
4. Make sure that the View Device by type is checked. Scroll down until you get to SATO-USB device.
5. Verify that it does not have any errors next to it. If it shows an error, remove the device and then reinstall it.
6. Reboot the PC and the Printer.
7. Consult the Windows Troubleshooting guide or contact technical support for further assistance.

Using the LAN Ethernet Interface

Printer Does Not Come Up Ready
If you cannot print to the print server after you install it, check the following:

1. Make sure that the printer is powered on, that all cables are securely plugged in, and that the printer is on-line.
2. If possible, connect a terminal to the serial port. If you see the boot prompt, the print server firmware has not been loaded properly. If reloading does not fix the problem, try setting switch 1 to ON (factory defaults) and powering the print server off and then on again; if the problem persists, the product may be defective.

**Installation Problems (Printer Comes Up Ready But You Cannot Print)**
If the printer starts up OK but you cannot print, the problem could be one of the following:

1. There is a problem with the interface between the print server and the printer.
2. There is a problem with the network connection or cabling.
3. There is a queue setup problem, a print server setup problem, or other protocol-related problem.


Ribbon Loading
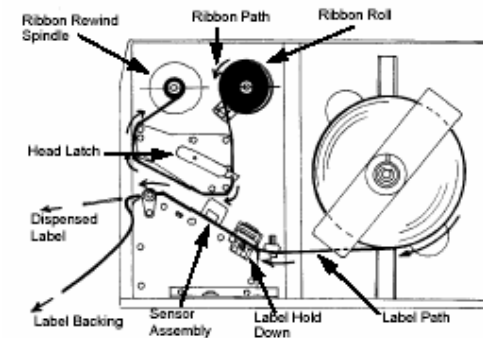
1. Open the Access Door by swinging it up and to the left and the Side Access Door by swinging it toward the rear of the printer.
2. Open the Print Head by rotating the Head Latch towards the rear of the printer. The Print Head is spring-loaded and will automatically open as soon as the Head Latch is disengaged.
3. Locate the extra ribbon core supplied with the printer. Place the core on the Ribbon Rewind Spindle, pushing it all the way to the inside of the spindle. *Note that the new empty core* of each subsequent roll becomes the next rewind core.
4. Load the ribbon onto the Ribbon Supply Spindle, also pushing it all the way to the inside of the spindle. The dull side of the ribbon should be facing down as it travels through the Print Head Assembly.
5. Feed the leader portion of the ribbon through the Print Head Assembly and up to the Ribbon Rewind Spindle following the routing shown in the diagram.
6. Load the ribbon behind and over the top of the Ribbon Rewind Spindle and tape it to the Extra Ribbon Core. Make sure it matches the ribbon path shown in the diagram.
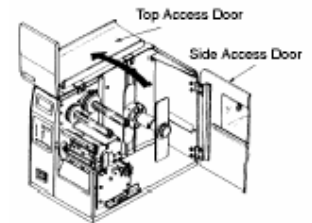
7. Manually turn the Rewind Spindle to wrap the ribbon onto the core one to two turns to secure it.
8.
9. If the labels or tags are already loaded, close the Print Head Assembly by pushing downwards on the black tab until it latches closed.
10. Run a test print to ensure that the labels and ribbons were loaded correctly.
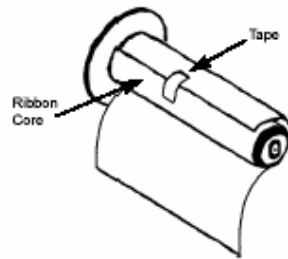
CAUTION: If your labels are less than the full width of the print head, the outside edge will eventually wear out a small portion of the print head, resulting in an area that will not print. Special care must be taken if you plan to use multiple widths of labels, since the damaged portion of the print head caused from edge wear on a more narrow label may affect the printing on a wider label. We suggest you plan your print formats carefully to avoid using the area of possible damage on the print head when using a wider label. The small area of damage will have no effect on printing with the undamaged part of the print head. Damage from a label edge is physical damage and is unavoidable. It is not covered by warranty. It is possible to delay such damage by always ensuring that the ribbon used is wider than the label stock. This will help to protect the print head from label edge damage.

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7. If you've checked all of the above and the printer still isn't printing, you may want to try a Buffer Hex Dump to determine what (if anything) the printer is receiving from your computer.

   The Parallel port is now listening for incoming data. Send your print job. The printer will now print (only once) a Hexadecimal (Hex) Dump of everything it received from the host computer. Each 2-digit hexadecimal character represents a character the printer received. It may be tedious, but now you can analyze and troubleshoot the data stream.

8. While checking the Hex Dump printout, if you notice 0DH 0AH (Carriage Return and Line Feed) characters throughout. The command string should be continuous and no CR or LF characters are allowed between the Start Command (<ESC>A) and the Stop Command (<ESC>Z). If you are using BASIC, it may be adding these characters automatically as the line wraps. Adding a "width" statement to your program and help to suppress these extra 0DH 0AH characters by expanding the line length up to 225 characters.

   If you're not programming in BASIC, check to see if you have an equivalent statement in the language you're using to suppress extra carriage and line feeds from your data being sent out to the printer. We want the data stream to be one complete line going to the printer.

Using the RS232C Serial Interface
1. Is the RS232C Serial cable connected securely to your serial port on the PC (DB-25S or DB-9S Male) and to the RS232C connector on the printer?
2. Is the cable defective? At the very least, you should be using a "Null Modem Cable", which crosses pins in a specific manner. This should enable your printer to print. But we recommend that you eventually use a cable built to specifications as described in Section 6: Interface Specifications.
3. Is the RS232 Interface Module installed in the printer? The M-84PRO printers require the new Hi Speed Serial Interface (PN WCL40451) to take advantage of the faster data transmission speeds. The older Serial Interface Modules will work, but at a reduced capability.
4. Check for obvious errors in the data stream. Is the data properly framed with the <ESC>A and <ESC>Z commands? See the Programming Reference if necessary.
5. If after sending your job to the printer, it only "beeps" and displays an error message on the LCD display, you may have a configuration problem. There may be some inconsistencies with the Baud Rate, Parity, Data Bits, or Stop Bits in relation to your host computer. If you are confused as to what the printer's current RS232 settings are, print a Configuration Test label. It will list all of the current printer configuration settings.

Troubleshooting

Initial Checklist
1. Is the printer powered up and ON-LINE?
2. Is the ERROR light on the front panel off? If this light is on, it may mean the Print Head Assembly or the Label Hold-Down is not closed and latched in position.
3. Are the LABEL and RIBBON lights on the front panel off? If these lights are on, the labels or ribbons may be incorrectly loaded.

Using the IEEE1284 Parallel Interface
1. Is the IEEE1284 printer cable connected securely to your parallel port (DB-25S Female) on the PC and to the Parallel Interface connector on the printer?
2. Does the Parallel interface cable used meet IEEE1284 specifications? If it does not and you are connected to an IEEE1284 or ECP parallel port on the computer, the printer may not be able to communicate correctly.
3. Is there more than one parallel interface port on your PC (LPT1, LPT2, etc)? If so, make sure you are sending data out the correct port.
4. Is the IEEE1284 Interface Module installed in the printer? Older versions of the Parallel Interface module will not work correctly in the M-84PRO printers.
5. When you send the print job to the printer, and it does not respond, do you get an error message on your PC that says "Device Fault" or something similar?

   This may mean that the computer doesn't know the printer is there. Verify that:
   a. Both ends of the cable are securely inserted into their respective connectors.
   b. The printer is ONLINE.
   c. The cable is not defective. There are other things that can cause this error message on your computer, but at this stage, a defective cable may be one of the reasons.
6. When you send the print job to the printer and it does not respond, and there is no error message on the PC:

   a. Check your data stream for some of the basics. Is your job framed as follows?
      <ESC>A – DATA – <ESC>Z
   b. Verify that you've included all required parameters in the data stream.
   c. Verify the following:

      You have not typed a "0" (zero) for an "O" (letter) or vice versa.

      You have not missed any <ESC> characters where they're needed.

      Make sure all printer command codes are capital letters.

Operation Panel
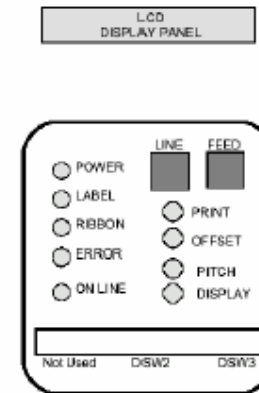
The M-84PRO Operator Panel consists of five LED indicators, two momentary contact switches, three DIP switches, four adjustment potentiometers and one LCD Display. All of these are accessible from the front of the printer. They are used to set the printer operating parameters and to indicate the status of the printer to the operator. After you power on the printer, familiarize yourself with the keys and indicators as it will help you understand the configuration process.

PRINT	Potentiometer to adjust print darkness (fine tuning).
OFFSET	Potentiometer to adjust amount of back/forward feed for dispenser/cutter/tear-off position (+/- 3.75 mm).
PITCH	Potentiometer to adjust home position of the label (+/- 3.75 mm). Affects stop position of label feed, print position and dispense position.
DISPLAY	Potentiometer to adjust the contrast of the LCD display.
POWER	LED, illuminated when power is on.
LABEL	LED, illuminated when the label supply is not detected.
RIBBON	LED, illuminated when the ribbon motion sensor does not detect any ribbon motion (ribbon out condition).
ERROR	LED, illuminated when there is a system fault such as an open print head.
ON LINE	LED, illuminated when printer is ready to receive data. Toggled on/off with LINE key.
LINE	Momentary switch. Pressing this key toggles the printer between the on-line and off-line mode. When the printer is on-line, it is ready to receive data from the host. This key acts as a pause during a print job by taking the printer off-line. It can also be used as a Pause function key to stop the printer during the printing process.

FEED   Momentary switch. Pressing this key feeds one blank label when the printer
              is off-line. When the printer is on-line, another copy of the last label will be
              printed (Reprint W/Feed must be enabled in the LCD panel Service Mode).
DSW   DIP switch array to set operational parameters of the printer.
LCD   2 Line x 16 Character LCD display. Used for setting operational parameters
              of the printer and displaying error conditions.

Printer DIP Switch Configuration
There are two DIP switches (DSW2 and DSW3) located on the front panel under a protective
cover. In addition, a third DIP switch is located on the RS232C Serial Adapter card and is
used to set the RS232C transmit/receive parameters. These switches can be used to set:
- Thermal transfer or direct thermal mode
- Label sensor enable/disable
- Head check mode
- Hex dump mode
- Single Job or Multi-Job Receive buffer
- Operation mode

Each switch is an eight section toggle switch. The ON position is always up. To set the
switches, first power the unit OFF, then position the DIP switches. Finally, after placing the
switches in the desired positions, power the printer back on. The switch settings are read by
the printer electronics during the power up sequence. They will not become effective until the
power is cycled.

RS232 Transmit/Receive Setting
Data Bit Selection (DSW1-1) – This switch sets the printer to receive either 7 or 8 data bits
for each byte transmitted.

Parity Selection (DSW1-2, DSW1-3) – These switches select the type of parity used for error
detection.

Stop Bit Selection (DSW1-4) – Selects the number of stop bits to end each byte transmission.

Baud Rate Selection (DSW1-5, DSW1-6) – Selects the data rate (bps) for the RS232 port.

Protocol Selection (DSW1-7, DSW1-8) – Selects the flow control and status reporting
protocols.

Printer Set Up
Print Mode Selection (DSW2-1) – Selects between direct thermal printing on thermally
sensitive paper and thermal transfer printing using a ribbon.

Sensor Type Selection (DSW2-2) – Selects between the use of a label gap or a reflective Eye-
Mark detector.

Head Check Selection (DSW2-3) – When selected, the printer will check for heads elements
that are electrically malfunctioning.

Hex Dump Selection (DSW2-4) – Selects Hex Dump mode.

Receive Buffer Selection (DSW2-5) – Selects the operating mode of the receive buffer.

Firmware Download (DSW2-6) – Places the printer in the Firmware Download mode for
downloading new firmware into flash ROM.

Protocol Code Selection (DSW2-7) – Selects the command used for protocol control.

Status Select (DSW2-8) – For emulating earlier series software commands. Should be used
only if problems are encountered using existing software. This switch will also affect the
settings selected by DSW1-7 and DSW1-8.

Backfeed Sequence (DSW3-1, DSW3-2) – Backfeed is used to correctly position the label for
application and then retract the next label to the proper print position. This operation can be
performed immediately after a label is printed and used, or immediately prior to the printing of
the next label.

Label Sensor Selection (DSW3-3) – Enables or disables the Label Sensor. If the Sensor is
enabled, it will detect the edge of the label and position it automatically. If it is disabled, the
positioning must be under software control using Line Feed commands.

Back-Feed Selection (DSW3-4) – When Back-Feed is enabled, the printer will position the
last printed label for dispensing and retract it before printing the next label. The amount of
backfeed offset is adjustable.

EXT Print Start Signal Selection (DSW3-5) – Allows an external device to initiate a label
print for synchronization with the applicator. When DSW3-5 is On, the unit is in the
Continuous print mode, Backfeed is disabled and External Signals are ignored.

External Signal Type Selection (DSW3-6, DSW3-7) – Both the polarity and signal type
(level or pulse) of the external print synchronizing signal can be selected.

External Print via External Signal (DSW3-8) – Allows the applicator to reprint the current
label in the print buffer.