

8262

# **Operator's Guide**



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#### Federal Communications Commission Radio Frequency Interference Statement

This equipment generates and uses radio frequency and if not used properly, i.e., in strict accordance with its operating instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when Class A equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which the user, at his own expense, will be required to correct the interference.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1. Reorient the receiving antenna.
- 2. Move the printer away from the receiver.
- 3. Plug the printer into a different outlet so that printer and receiver are on different branch circuits.
- 4. Consult an experienced radio/TV technician for additional suggestions.

#### **U**Warning

To avoid the possibility of a shock hazard, fire, or violation of your equipment warranty, any INTERNAL modifications of your equipment should be done ONLY by a qualified service representative.

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## How to Use This Manual

This manual will guide you through all the procedures you'll need to set up and operate your 8262. If you are setting up your printer for the first time, be sure to read the sections in order. To help you find the information you need quickly and easily, this manual has been divided into five sections.

Chapter 1:	Getting Started Tells you all the procedures needed to get your 8262 up and running. It includes instructions on connecting, configuration settings, and powering on.
Chapter 2:	<b>Operating the 8262</b> Tells you how to control and monitor your unit by using the key functions, LCD, LED's. Paper loading, ribbon replacement, and band removal/ installation are also covered.
Chapter 3:	Maintaining Your Printer Gives instructions and special tips on the care and cleaning of your printer.
Chapter 4:	Solving Problems Covers solutions for print quality problems, as well as operator correctable and service required faults.
Appendix	Lists printer specifications and specifications for ribbons and paper. Also lists the interface default switch settings.

# Chapter 1

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Chapter 1: Getting Started 2

Getting to Know Your 8262

Take a few minutes to get acquainted with your 8262 before you start printer operations. With the top cover closed, you will see the viewing window and the control panel. To open the top cover, locate and press the top cover release button. You may also open the front paper loading and rear paper exit doors to view such things as the power cord and coaxial cable connectors.



### Connecting the 8262

Before your printer can receive information to print, it must be connected to an AC power outlet and to the coaxial cable connector. The coaxial connector is located in the upper left corner inside the rear door of the printer. The AC connector is located in the upper right corner inside the rear door.

Connecting the Coaxial Cable

The coaxial cable connects the printer to the host computer. You must purchase this cable separately. To get the right cable for your computer, contact your printer sales representative. To connect the coaxial cable:

- 1. Be sure the power is OFF.
- 2. Connect the coaxial cable to the connector inside the rear door as shown.
- 3. Connect the other end of the cable to the interface port on the host computer.



### **Connecting Your 8262**

# Connecting the Power Cord

You will receive one power cord with your printer. This cord is for connecting the 8262 to an AC power outlet. To connect this cord:

- 1. Be sure the printer's power switch is in the OFF position.
- 2. Connect the power cord to the connector on the printer as shown.
- 3. Plug the other end of the cord into an AC outlet.



## Power On/Off Procedure

Once you have connected the power cord, you may want to power on your printer. This section tells you how to power on and power off.

Powering On	<ul> <li>Before you power on your printer, be sure that:</li> <li>the power cord is securely connected</li> <li>the ribbon and band are installed</li> <li>the paper is loaded</li> <li>If all these conditions are satisfied, turn the power switch ON.</li> </ul>
	No Errors Present If there are no errors present: the green READY and POWER LEDs go on. the red ALARM/CLEAR LED goes on and then off. You are ready to begin operation.
	Errors Present If there are any errors present when you power on, ALARM/CLEAR LED remains on. the display indicates an error. the READY LED stays off. To clear the error: Power switch We stay off. To clear the error: READY LED goes on
	2. If ALARM/CLEAR LED is still on, refer to "Solving Printer Problems" section to correct the condition.
	3. Press ON LINE. ON LINE LED goes on. Your printer is ready for operation.
Powering OFF	1. If ON LINE LED is lit, press ON LINE switch once to place the printer off line.
	2. If LED remains on, this means that unprinted data remains in the printer memory. Wait until this data is printed and the LED will go out
	3. Set power switch to OFF.

POWER SWITCH

At initial setup, or setup for a specific job you may want to view or change the configuration settings. There are three configuration settings you may change. All other settings are defaults which must be set as listed below. Defaults are settings which are set at the factory for use at power on.

**Default Settings** 



To view the default and user selectable settings, set the MODE toggle switch to 1. This places the printer in second function mode. The display will show the items sequentially scrolling up from 01 to 19.



For normal operation, set the MODE toggle switch to 0. This places the printer in primary function mode which allows direct operator control of the primary function keys. These keys are described in the following section, *"The Control Panel Keys"*.

The following chart lists the second function defaults and user options. Only the three user option settings can be changed.

Summary of Second Functions								
Item No.	Function	Setting	User Option Selections					
$\begin{array}{c} 01\\ 02\\ 03\\ 04\\ 05\\ 06\\ 07\\ 08\\ 09\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\\ 19 \end{array}$	COLUMNS AUTO FLDOVER AUTO PRINT LF ON CR PARITY 1403 COMPAT PF SKIPOVER TIMEOUT INTERFACE VFU SKP OVR STP CNT TR PAPERSCRL PRINT ON BOF OVRPRNT STEP COUNT63 80 COL SFTST I/F DPC EXT INTERFACE PAPER INSTR	136 1 0 0 NONE 0 0 10 8 BIT 0 0 1 0 8 0 DPC 0 1	2, 5, 10 0, 1 8, 140					

(1 = ON, 0 = OFF)

**User Selectable Options** 

printer is taken off line Overstriking

Selecting User Options

The following paragraphs describe the user selectable items listed in the above chart. Descriptions of the configuration functions that cannot be changed, can be found in the Appendix.

**Band Time Out (08)**- Band time out is used during setup procedures to set a time, 2, 5, or 10 seconds, within which the printer must receive the next print job. If the printer receives no new information within this time the band will shut down. This function reduces start-up delays between jobs, improves throughput, and eliminates unecessary operation of the print band. The default setting is 10.

**Paper Scroll (12)** - When enabled, paper scrolls up so you can view the printed copy when printing stops and moves back when printing resumes. When disabled, paper remains at the print station. The default setting is enabled. linit

**Overprint (14)** - Line overprint can be selected to be either 8 overstrikes or 140 overstrikes. This function is used to make characters darker or

bolder than a single strike. This setting allows the print or to "decide" whether overstriking that is occurring is intent inten tions!

To select the user selectable second function options you will need to use the Mode toggle switch, the second function keys 01 through 09, and NEXT as described in the following procedure.

1. Set the mode toggle switch to 1. The printer is now in second function set up mode.



The display will show the items sequentially scrolling up from 01 to 19. Each item will show:



2. First, key-in the item numbers. The display will stop on that selection, and show the item number, function, and current setting. Some functions have a two state condition ON or OFF (1= ON, 0=OFF).



3. Press NEXT to change the current item setting.



see P.

01 COLUMNS 132

**08 TIMEOUT** 10

4. If you wish to key-in another item, simply key-in the desired item number, and setting as described in steps 1-3.

5. After the configuration is complete, set the mode toggle switch to 0.

6. Finally, press ALARM/CLEAR to master clear and reset the printer for continued operation. Also stores the new settings





READY

#### **•EXAMPLE**

To change TIMEOUT to 5 and PAPERSCRL to 0 you would:

- 1. Set the mode toggle switch to 1.
- 2. Key-in item number 07.
- 3. Press NEXT until 5 is displayed in the LCD.
- 4. Key-in the next item number which is 12.
- 5. Press NEXT until 0 is displayed in the LCD.

After this is completed, set the mode toggle switch back to 0, and press ALARM/CLEAR to master clear and reset the printer for continued operation.

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# Chapter 2

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The control panel consists of a variety of keys and a 16-character alpha numeric display which allow you to control and monitor the operation of your 8262. This section describes each key, indicator, and message, which can be viewed with the top cover closed. Keys which are accessed with the top cover open are covered later.,

### described

Mode Toggle Switch Coven OPEN

The Control Panel

The control panel keys have two functions, Primary function or Secondary function, which are determined by the mode switch.

- Primary functions allow direct operator control and are active only in Mode 0.
- Secondary functions are active only in set up mode 1. They are the number keys 0 through 9 and NEXT, and are used to configure the printer.
   See Chap Ler L



CONTROL PANEL (Top cover Open)

#### **Control Panel Description**

The following paragraphs describe the LCD, keys, and LED's accessed with the top cover closed.

🔿 Ready Power () READY Тор Paper of Step Form Slow 0n Alarm 8LPI Clear Line Speed

#### Liquid Crystal Display (LCD)

LCD (Liquid Crystal Display) - This 16 character LCD shows status and diagnostic messages in English sentences.

READY

#### Keys and LED's

Ready

Power (

**Ready** - This green LED is activated only when the following conditions are met.

- Ready to print (when on line).
- No faults exist.
- Paper is loaded.
- ALARM LED is off.

If the printer is off line, it can only be placed on line if the READY LED is lit.

Power - This green LED is lit when power has been applied to the printer.

### The Control Panel



8LPI

Alarm

Clear

7

8

Next - When configuring the printer, this key selects the next function or value. (Mode 1 only.)

Slow Speed - The yellow LED is lit when the printer is operating at 400 LPM for crisp, clear, high quality print. When in normal mode (600 LPM correspondence), LED is not lit. (Model 3 only).

(what is a Model 3)?

8LPI - Allows selection of line spacing. It toggles between 6 and 8 LPI.

The yellow LED is lit when operating at 8 LPI.

Alarm Clear - On power up, the red LED is lit during initialization. After the process is complete, the LED goes off. The LED stays on when any error or fault condition occurs. The specific fault is shown on the display (see "Solving Printer Problems"). After a fault has been corrected, pressing the switch will master clear and reset the printer for continued operations, and the red LED will turn off.

It no problems remain the



**On Line -** pressing this key toggles the printer between on and off line. When on line, the printer is ready to receive data. All stored data will be printed before changing from on line to off line. The **green LED** is lit when on line. When off line is selected, the printer is in a HOLD PRINT state.



**Top of Form** - Advances paper to the next top of form position. This momentary key is disabled when the printer is on line.



**Form** - Advances paper in small steps up or down, to align paper with preprinted forms. When off line, if pressed and held, paper will advance continuously. If pressed while printing, the paper will reposition itself one small step every one line.



3

**Phase -** This key is used for print quality adjustments. It centers characters and maintains equal print density on the left and right side of the character. A displayed block on the LCD indicates corresponding phase

position. See page 27 for details.

**Copies** - Increases or decreases hammer impact energy for printing on multipart or single sheet paper. The display shows a moving bar, which by length indicates a low to high intensity copies setting.



Copies

**Paper Step** - Advances paper one line at a time. This line feed key is enabled only when the printer is off line.

Summary of Indicators								
Key	LED Color	Description						
Power	Green +	5 volt ON.						
Ready	Green	Printer Ready to print.						
Alarm	Red	Failure detected						
On Line	Green	Ready to receive data.						
8 LPI	Yellow	Printer in 8LPI mode.						
Slow Speed	Yellow	For Model 3 only. The 8268-Model 3 (600LPM printer) prints at 400LPM.						



The 8262 handles standard fanfold, edge-punched paper from 3 to 6 inches wide (7.63 to 40.64 cm) and from 1 to 6 parts. See "Specifications" for details on paper specifications. This section will tell you how to load paper, as well as set the forms length and top of form (TOF).

Setting Forms Length

form isn't even louded yet!

Before you begin, be sure the ribbon and band are installed and the power switch is set to ON. You should also set the forms length to the required length. To set the forms length:

1. Be sure the mode toggle switch is set to 0, and the form is at the TOF position.

2. Press OFF LINE to place the printer in hold.

3. Press Form Len. and the display will show the current value, then scroll up through the allowable forms length values by pressing Form Len. repeatedly. Forms lengths from 3 to 14 inches in increments of 1/3 and 2/3 for 6 LPI, and 1/4, 1/2, and 3/4 increments for 8 LPI are available.



(Top Cover Open)

4. When the desired form length is displayed on the LCD press ON LINE to return to ready mode using the new selection.

Preparing the Printer

1. Open the front door.

2. Hold the stacking panel with flanges facing you. Place one magnet flange on the base and two on the side of the cabinet.



- 3. Place 11-inch or longer forms on the paper shelf.
- 4. Place forms shorter than 11 inches on the cabinet floor.



5. Open the rear door.

6. Place paper break on cabinet base with raised portion running from back to front. Position raised portion at center of forms.



7. Check that the horizontal position of the tractors fits the size of paper being used. If not, pull the lock lever s toward you to unlock the tractors.



8. Open all tractor flaps.



- 9. Position the paper so that the side to be printed is toward you.
- 10. Feed paper up between cabinet top support and metal paper shield.



11. Insert paper through the throat opening at a slight angle. Pull paper over top tractors.



- 12. Fit paper feed holes over left set of tractor pins. Close tractor flaps.
- 13. Move the right set of tractors horizontally and fit paper feed holes over tractor pins.



14. Push lock levers back to lock tractors in place, and close tractor flaps.



To remove any buckle in the paper between upper and lower tractors, push in, then turn paper tension knob as shown.

#### Aligning Top of Form

Left Margin and Paper

Width Adjustment

To align TOF follow the procedures listed below.

1. Turn paper tension knob to align the perforation with desired setting for the first print line. Settings from one to ten lines appear on the scale to the left of the paper. The illustration shows a 6 LPI format. In this example, the first print position will be six lines after the perforation. With the scroll feature on, paper will scroll up and first line of print will be at the desired position.





# First print position must appear on any one of ten lines following the perforation.

- 2. For 8LPI, press LPI (LED on), use the 8 LPI index scale, and align the paper perforation.
- 1. Pull the lock levers toward you to unlock.



2. Move paper and upper and lower right tractors horizontally to align with desired mark on forms alignment scale.



3. To check the new margin, generate a print test pattern.



4. Push lock levers back to lock the tractors in place. Close the tractor

4. Push lock levers back to lock the tractors in place. Close the tract flaps. The peleft poper feed hiles should not be in the printing area.

#### *<b>NOTE*

Make sure that the paper is taut between the tractors.

## Replacing the Ribbon

Your printer will come with the ribbon installed. Perform the following procedure when a new ribbon is needed. A new ribbon is needed when print appears faded or the ribbon begins to tear.

**Removing the Ribbon** 

To remove the ribbon, be sure the printer is set to OFF LINE then begin the following procedure.

- 1. Rotate left reel toward you to loosen ribbon tension.
- 2. Pull out reel and remove from spindle.



- 3. Lift ribbon and reel over ribbon guide.
- 4. Slide ribbon out from under ribbon plate.
- 5. Pull out right reel and remove from spindle.
- 6. Remove ribbon reels from printer.



Installing the Ribbon

- To load the ribbon follow these steps:
- 1. Push left reel onto spindle.
- 2. Run ribbon over ribbon guide and slide ribbon under paper guide plate.

around

5

3 Run ri bhon guide 3 Run ht ribbon guide y 3 Push right reel onto spindle.

4. Rotate reel away from you until ribbon slack is taken up and ribbon is under paper guide plate.

Ribbon reels are now installed.



## Band Removal/Installation

In this section you will learn how to remove and install the band for cleaning or replacing.

**Removing the Band** 

- 1. Set the power to OFF.
- 2. Remove the paper and ribbon reels.
- 2. Push the lever up to release band tension.



3. Carefully guide band between transducer and left pulley.

4. Rotate left band pulley and slide band off both pulleys at the same time. For band cleaning steps see "*Maintaining Your Printer*".



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### Band Removal/Installation

#### Installing the Band

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2	0	0	0	0	0	0	0	0	0	0	0	0	0	$\left  \right\rangle$

1. Grasp the band on both ends with printer characters facing inside of band and slots towards you, and guide through throat opening.



- 2. Place band around right pulley.
- 3. Place band around left pulley.
- 4. Carefully guide band between the transducer and pulley.
- 5. Push lever down to lock pulley.
- 6. Rotate either pulley counterclockwise until band is seated properly on both pulleys.



Band is now installed.

#### **<b>\$NOTE**

After a band change, check print for proper character registration.

#### Self-Test/Print Registration Adjustments

The self-test should be done after the print band has been changed.Before you begin, be sure that: Power switch is set to ON, paper and ribbon are loaded, display shows READY, on line LED is not lit, and the top cover is open.

With the top cover open you will see the TEST key. Consecutive pressing of this key cycles the printer through the following modes of operation.

- a.) *FIXED PATTERN* prints an H in every column.
- b.) SHIFT/REPEAT prints a sliding pattern, where every character prints in all columns.
- c.) *READY* terminates TEST mode, returns printer to READY mode. Pattern under test is indicated on the display.

You will also see the Flt. Time and Hmr. Sel keys. These keys are covered on page 38, "Maintenance Keys".

- 1. Press TEST twice to select SHIFT/REPEAT.
- 2. Close top cover.
- 3. Press ON LINE to start print cycle. Allow a sufficient number of lines to be printed.
- 4. Press ON LINE to stop print cycle. Paper will scroll up to last line of print.
- 5. Open top cover. Press TEST. The display will show: READY.
- 1. Open top cover.
- 2. Press TEST to select FIXED PATTERN.



3. Close top cover.

4. Press ON LINE to start print cycle. If printer is configured for scroll, paper will scroll down, then printing will start on the next immediate line.



Print Registration Adjustments

Self-Test Procedure

5. Press PHASE to adjust hammer impact to center characters. Make sure that both sides have equal density and the center bar meets the sides. The H pattern should be used.



Normal factory setting is in the center position. (In this example, a phase adjustment is required to the right position.)



6. Adjusting copies control will vary the hammer impact. Adjust to lowest setting (display block set to left side) that produces acceptable quality on the last copy of a multi-part form. This allows the best print quality.



7. After adjustments, press ON LINE to stop print cycle.

8. Press TEST. Display will show: READY.

# **Chapter 3**

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## Maintaining Your Printer

The 8268 printer is designed for minimum maintenance. However, it will require occasional cleaning. For your convenience, we have listed a recommended cleaning schedule for you to follow. A printer cleaning kit is available from your printer sales representative.

## Recommended Cleaning Schedule

Clean band every 30 days.

• Vacuum printer interior every 7 days.

This maintenance may be required more or less frequently depending on what you use your printer for, how often it is used, and where you use it.

You should also periodically inspect and clean the printer area that is immediately accessible under the top cover. Occasionally during paper loading or ribbon replacement, inspect the printer for a build-up of lint or foreign material. If the build up of material is evident, clean the area with a lint free cloth.

#### **Cleaning Your Printer**

1. Set power switch to OFF.

To clean your printer perform the following steps.

2. Raise top cover.

- 3. Remove ribbon reels.
- 4. Remove band.
- 5. Clean all surfaces with 91% isopropyl alcohol.

6. Clean all ink from printer parts.

If the band requires cleaning, place it in a shallow pan. Then, with cleaning solution (91% isopropyl alcohol) in a bottle with a spray nozzle, saturate the band. Using a small stiff bristle brush, clean both sides thoroughly, adding more solution as required, then allow it to drip dry.

### **<b>\$NOTE**

## Do not bend band tighter than a 6 inch radius.

Clean band and ribbon paths. Moisten a soft cloth with 91% isopropyl alcohol and clean both band pulleys, the visible portion of the ribbon mask, and the ribbon guides. These paths should be free of lint and ink. If needed, vacuum ribbon reel wells, and interior areas under the print station.

Check Air Filter. If in a cabinet, it is accessible from the inside of the cabinet at the bottom of the right side. If on a pedestal, the filter is accessible from the front of the filter housing, just below the front trim strip.

### **<b>\*NOTE**

After completion of the cleaning procedures, check for proper print registration. If adjustments are needed, refer to "Self-Test/Print Registration Adjustments" for procedures.

After Each Ribbon Change

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# **Chapter 4**

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Print Quality Problem Solutions

The following list contains some helpful hints to correct print quality problems.

Problem Description	Possible Cause
Left or right portions of char- acter missing.	Improper PHASE control adjustment.
Smeared characters	Improper copies control adjustment. Poor paper quality. New ribbon required.
Carbon copies too light/dark	Improper copies control adjustment. Too many copies, paper too stiff, or poor quality carbon.

When an error or fault exists in the printer, a message is displayed on the control panel LCD and the ALARM LED is lit. This section will list a variety of operator correctable faults.

**Operator Correctable Errors** 

Most of the problems you encounter during normal operation are called operational problems which may be corrected without the assistance of a maintenance technician. In the following list of operator correctable errors, one or more solutions are given. If one solution does not remove the error indication, press the ALARM/CLEAR switch to reset the printer and try the next one and so on, until the error is cleared. If the solutions listed do not correct the problem, the services of a maintenance technician will be required.

<b>Operator Correctable Errors*</b>	
Error	Cause/Corrective Action
PAPER LOW	Install paper. Check paper tracking.
CHECK PAPER	Clear paper jam. Clean paper motion sensor.
CHECK RIBBON	Check for ribbon jam. Reels are not engaged with motors. Replace worn ribbon.
CHECK BAND	Check tension lever and position properly. Check band and position properly. Transducer output missing. Band not up to speed. Check band sync.
CHECK TOP COVER	Close top cover.
AIR FLOW FAULT	Check for hammer bank air flow. Check blower.

**\*NOTE\*** 

Press ALARM/CLEAR switch to reset. If error persists, refer to Maintenance Guide or call service personnel.

Service Required Faults

For the faults listed below, power down, wait a minute and power up. If the fault persists, call service personnel.



There are a few keys which are accessed with the top cover open. Of these keys, two should be used only for maintenance purposes. These keys are listed below.

Maintenance Keys

Flight Time - Turns Flight Time mode on or off for hammer adjustment procedures. When on, display shows FLT.

Hammer Select - Active only in Flight Time mode. If pressed, current hammer under test is displayed. FLT HMR #XX then scrolls up after ten seconds. Holding the key down continuously advances test hammer position. Pressing ON LINE starts hammer test cycle and flight time adjustment. Display shows FLT HMR3XX 500 (500 is normal). Toggling ON LINE stops the test.



# Appendix

## Appendix

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## **Specifications**

## This section will tell you printer, ribbon, and paper specifications

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		17115		ntions
~ ~ ~ ~ ~		~ ~ ~		

Print Speed, 64 character band Model 13- 325 LPM Model 3 - 650 LPM

Print method: Impact

Input Power: 90-140 VAC, 200-264 VAC Universal Power Supply

Frequency: 50, 60 Hz, +-1.0 Hz Single phase

Power consumption: 200 watts (standby), 600 watts Model 3, 400 watts Model 13 (printing) UL 478, CSA C22.2, FCC Class A VDE 0871+0875 Class A

Acoustics: Model 13- console/pedestal 62 dBA, Model 3- 55 dBA cabinet

Character sets: 56, 64, 112, 128

Paper width: 3 inches to 16 inches (76.2mm to 406.4mm)

Forms length: 3 inches to 14 inches (76.2mm to 355.6mm)

Copies: 1 to 6 part

Lines Per Inch: 6, 8, or 12

Print columns:132/136 standard

Dimensions: Width - 31 inches (780 mm) Depth - 26 inches (670 mm) Height - 13 inches (300 mm) Pedestal & Cabinet - 44 inches (1.16 mm)

### **Ribbon Specifications**

Part Number	Thickness/Length	Туре
271379-001	5 mil/100 yards	Black record nylon
271379-002	4 mil/100 yards	Black record nylon

## **Paper Specifications**

The following table is a guide for selecting forms to be used in the printer. Forms that meet these specifications should produce satisfactory results. Be sure to check print quality and paper handling under your specific operating conditions, before purchasing large amounts of paper or forms.

Some carbonless, multipart forms will not produce satisfactory copies. It is recommended that you test paper under your specific operating conditions to verify proper paper handling and printout legibility before purchasing large quantities of this type of form. Forms that increase the maintenance requirements of the printer are not recommended.

Item	Specifications
Туре	Standard fanfolded, edge-punched.
Dimensions Width Length	3 to 16 in. (7.62 to 40.64 cm) over all. A printer with the forms length select being used may accommodate a minimum form length of 3 in. (7.62 cm) and a maximum of 14 in. (35.56 cm).
Weight*	A maximum forms thickness of up to 0.02 in. (0.5 mm) can be accomodated. Single copy: 15 lb (56gsm) bond minimum. 18 to 20 lb (68 to 75 gsm) bond recommended. Multi-copy: Typically 12 lb (45 gsm) bond with 6 to 8 lb (14 to 19 gsm) single-shot carbon for up to
	six parts. Card Stock: 15 to 125 lb (56 to 470 gsm).
Environmental	Recommended operating and storage of forms for best printing. Temperature of 16 degrees LC (60 degrees F) and a relative humidity of 40% to 60%.

\* Paper weights are based on bond = 17 inches x 22 inches x 500 sheets, or carbon = 20 inches x 30 inches x 500 sheets (gsm = grams per square meter).

There are two dip switch packs located on the interface board. Switch pack E3 has eight switches and controls model and language selection. Switch pack E2 has twelve switches which control special printing functions. If alternate settings are desired, contact your sales representative for details. A service representative is required to access these switches. The default settings of these switches are listed below.

Switch Pack E3

Switch	Function
1 - 5 6 - 8	Language- English, U.S. IBM Model Selection- Model 4 (3440 buffer)

Switch Pack E2

Switch	Function
1 2 3 4 5 6 7 8 9 10, 11 12	8 LPI Double space between lines Mono case (all upper case) printing Form feed on local copy Form feed on end of job Print null lines 3262 ID Honors controls at MPP+1 (IBM RPQ 9501, 9502) Reserved A non-SCS form feed at the end of a print will advance the form to the first print position on the first line of the next form. 102 character band

**Configuration Default Setting Descriptions** 

This section lists the functions of the configuration settings listed on pgs.7-9. These settings cannot be changed. If they are changed, you will experience problems with operation. The three user selectable settings are covered earlier.

Columns (01) - Sets the column length at 136 characters.

Automatic Fold Over (02) - Converts the 32 lower case characters of the 96 US ASCII code, to its equivalent upper case.

Auto Print (03) - Print starts when the control code is received, if more than 136 characters are received before the control code, the first 136 characters are printed.

Line Feed On Carriage Return (04) - The default setting is deselected. If selected, a line feed is generated when a carriage return (CR) code is received.

Parity (05) - Sets parity mode to none.

**1403 Compatibility (06)** - Default setting is deselected. When selected, if a tape channel command is received from the user system to advance the next channel in a specific channel, paper will not advance if the paper is positioned at the channel specified and no print data was transmitted.

**Perforation Skip (07)** - Perforation skip-over is set to 0 lines.

Interface (09) - Interface is selected to be 8 bits.

**VFU Skipover (10)** - Printing can occur between bottom and top of form when disabled.

**Step Count Truncate (11)** - The default setting is disabled. When enabled, a step count command will terminate at Top of Form if the command would have moved past the Top of Form position.

**Print Bottom of Form (13)** - Last line of print on a page is one line before bottom of form (channel 12).

Step Count (15) - Step Count is selected to be 63 lines maximum.

80 Column Self Test (16) - Print pattern is 136 columns.

Interface Selection (17) - Printer interface is selected to be Datapro.

**Extended Interface (18)** - Default is disabled. When enabled, allows the printer to transmit fault codes via the printer interface lines.

**Paper Instruction (19)** - Allows the printer interface to recognize a paper instruction input from the user system.z