Bryce

World Leader In Address Printers
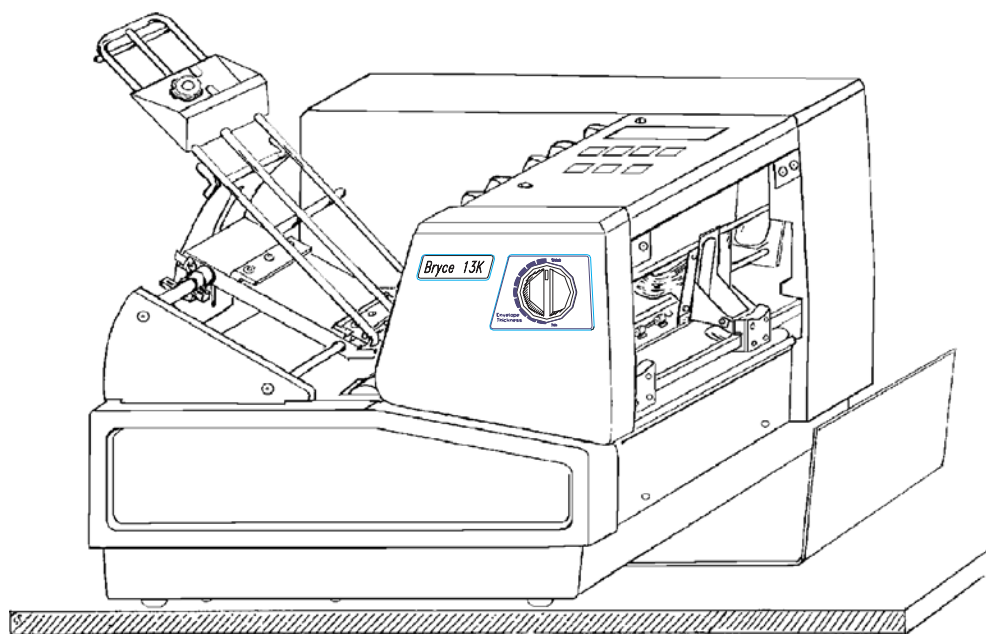
13K

Users Manual

WARNING
WARNING: HIGH VOLTAGES ARE PRESENT BEHIND THE COVERS AND IN THE PAN ASSEMBLY.   Never remove the pan access cover assembly or rear cover assembly since there are no user serviceable parts inside. The electrical and/or sensitive parts may only be serviced by an authorized Service Representative.

Important Safeguards :**Read all instructions before attempting to operate this equipment.**

❑ To reduce the risk of fire and/or electric shock, do not attempt to disassemble this machine.

❑ The machine is not intended for use in hazardous locations. Do not use in environments known to contain flammable or explosive gases.

❑ To prevent overheating, do not cover vent openings or use the machine over a radiator or heat register.

❑ To reduce the risk of injury, refer all non-operator service functions to qualified service personnel.

❑ Access only those operator designated areas of machine for jam clearing. All other areas of machine requiring disassembly or removal of covers should only be accessed by qualified service personnel.

❑ This machine cabinet serves to enclose hazardous parts. If the machine has been dropped or otherwise had the cabinet stressed in any way, report it to your local service representative.

❑ In the performance of operator service procedures, be certain the machine is unplugged from the wall.

❑ Do not attempt to use this product in an unauthorized manner. To do so may expose you to mechanical and / or electrical hazards.

❑ Do not expose power cord to sharp points or edges.

❑ To protect against shock, the power cord must only be plugged into a grounded receptacle. The ground pin on the plug must never be removed.

❑ The power cord should be routed so it cannot be walked upon.

❑ Do not operate this machine with a damaged power cord or plug.

❑ Unplug or otherwise disable this machine before cleaning.

❑ Know how to turn off power in the work area, and to summon help in the event of an emergency.

❑ Do not remove safety covers for cleaning, adjustments or repairs. Call your service representative.

❑ Keep office supplies such as paper clips, staples, rubber bands, etc., away from machine.

❑ Keep loose clothing ties, jewelry, and long hair away from moving parts of this machine.

❑ Ink formulations for use in this machine are critical. Use only those specified.

❑ **Notice**: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

❑ Treat every circuit as if it were live. Check first with a neon tester or a voltmeter.

Federal Communications Commission Compliance

"This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1). This device may not cause harmful interference, and
2). This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with FCC Rules Part 15 subpart B Class B for a digital device. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful 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: Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.

Canadian DOC Compliance.

"This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Caution
Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.
VORSICHT
Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen gleichwertigen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.
ADVARSEL
Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage tilleverandøren.

Notice

The information in this document is subject to change without notice. Bryce Office Systems makes no warranty of any kind with regard to the material contained herein. Bryce Office Systems will not be liable for incidental or consequential damages in connection with the furnishing, performance or use of this material.

Who is this manual for?

This manual is for the person who is new to the Bryce 13K Address Printer and needs a step by step instructions to setup and operate the printer.

The appendix at the end of the manual has information for those who are familiar with the 13K printer and simply want a quick reference or want more specific technical information on the 13K printer.

Sections 1 - 3

The first and second chapter introduces you to the components of the printer and what accessories came with your new printer. Chapter 3 runs you through the basics of how to install and remove the parts that came in the accessory box with the printer.

Sections 4 - 6

Once the printer has been assembled some adjustments are necessary to maximize the performance of the printer. When working with the address printer these chapters will give you step by step instructions on what you need to do. It is always a good idea to read through menu section before running the printer. This section explains the options that are available to run a mailing job.

Sections 7

The chapter on Troubleshooting contains a list of possible problems you may encounter with the printer and their solutions. Periodically follow the general maintenance steps to keep the printer clean and functioning properly.

Appendices

The appendices include a quick reference table for the 13K menus, a listing of the PCL commands the printer recognizes, a hex chart to help work through a HEX dump, and references of setting up the most popular software to work with the printer. The final section has a list of supplies available for your printer.

Unpacking

- As you remove the boxes contents, check the pieces against the following list.

	1
	2
	3
	4
	5
	6
	7
	8
	9
	10
12	11
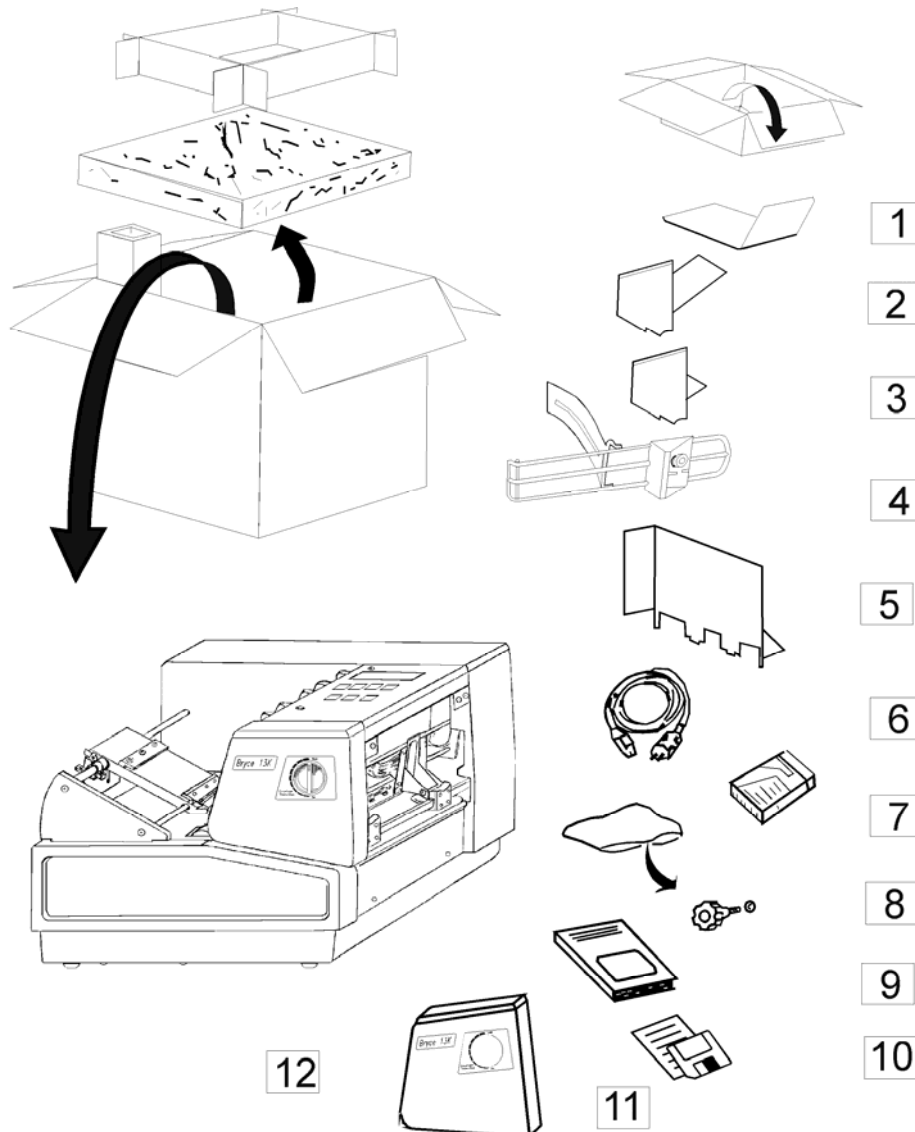
☑**CHECK LIST**

__ 1. PAPER CATCH ASSEMBLY		__ 7. . INK CARTRIDGE (BLACK)	
__ 2. LONG FENCE		__ 8. CLAMP KNOB & WASHERS (2X)	
__ 3. SHORT FENCE		__ 9. USERS MANUAL	
__ 4. WIRE FORM		__ 10. PRINTER DRIVER & INSTRUCTIONS	
__ 5.BIN EXTENSION		__ 11. END COVER	
__ 6 LINE CORD		__ 12. ADDRESS PRINTER	

THE PARTS OF THE PRINTER

Input Bin

input bin. The input bin consists of the Wire Form assembly, Sliding

Wire Form
Assembly

Separator H-Block
Assembly

Control Panel
(LCD Display

Print Head
Holder Assembly

Feed Ramp

Bryce 13K

Envelope Thickness Knob

Catch Tray Assembly

Input Bin   Print Station   Catch Tray
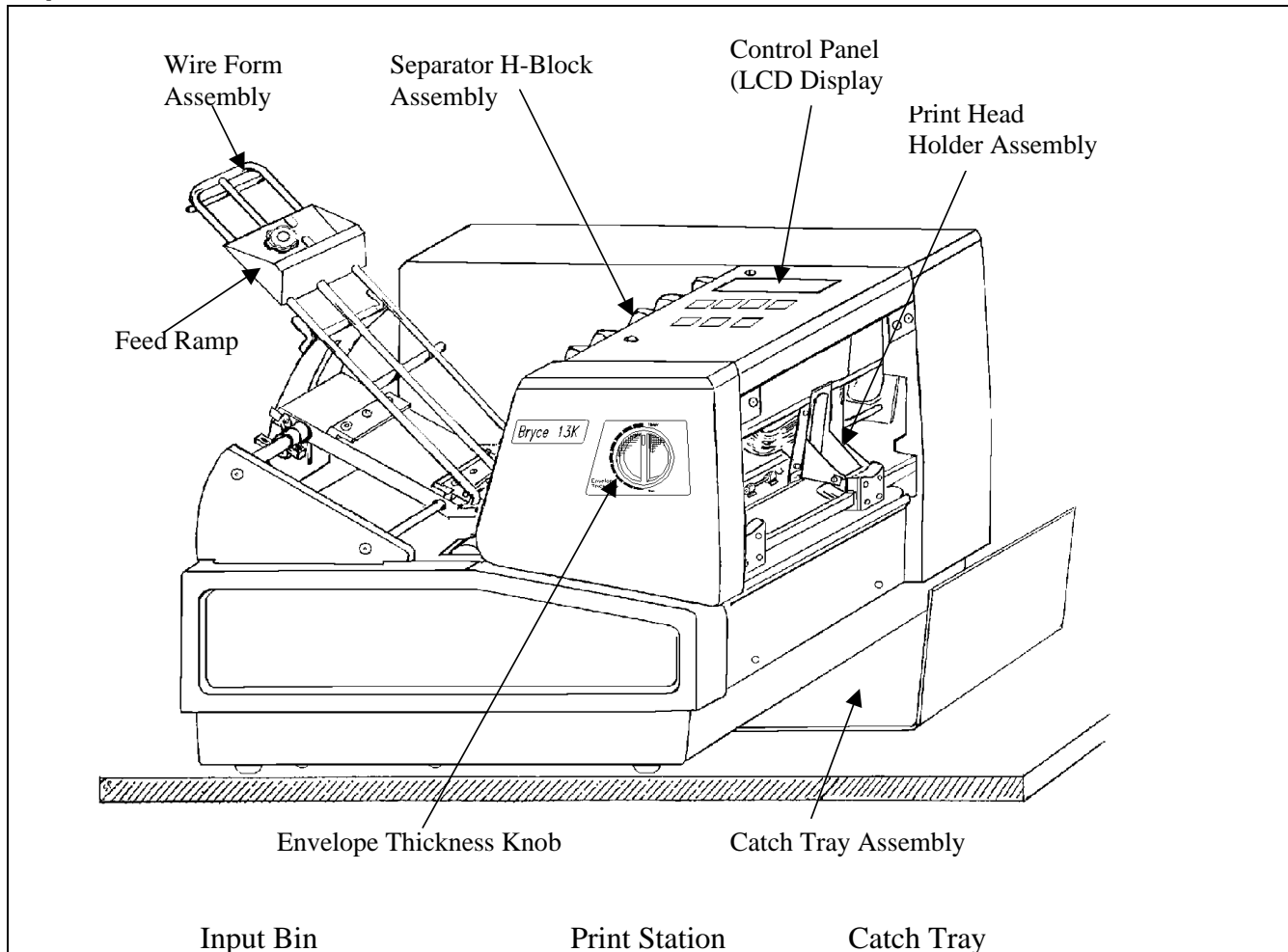
Fence (not shown for ease of illustration) and Separator H-Blocks. Adjust these components to run a variety of media.

**Control Panel &
Print Station**

The print station processes the data, produces the barcode and prints out the page. The ability to change the print quality and speed is handled through the Control Panel and menu options. Use the printers Adjustment Lever to further enhance the quality of the print.

Catch Tray

The printed media is placed in the Catch Tray Assembly. Media can stack of up to five (5) inches (12.7 cm) in the tray before it has to be emptied.

End Cover

Install the *End Cover* which is packed in the accessory box, by inserting the latches into the catches.

Media for printing is placed in the

Choosing a Good Location for the Printer

Note: AB switches are not recommended for operation with this printer.

The following environmental considerations must be kept in mind when selecting a location for the Address Printer. Doing otherwise may affect the operation and performance of the Address Printer.

1. Place the printer close enough to the computer for the parallel or serial cable to reach.

2. Place the printer on a flat, stable surface.

3. Use a grounded, dedicated outlet for the printer only. **Note**: Do not use an adapter plug.

4. Avoid locations near direct sunlight, excessive heat, high humidity, moisture, or dust.

5. Keep the entire system away from large motors or other appliances that might disturb the power supply or create potential interference.

Removing Protective Materials

The printer is protected during shipping by a sheet of corrugated cardboard around the Print Head Holder Assembly, a cardboard support tube next to the Feed Carriage Assembly and a wooden wedge between the Floor Assembly and the Print Station Cover Assembly.

1. Raise the Front Door to gain access to the interior.

2. Remove the corrugated cardboard. Be careful not to grab or pull on the ribbon or encoder strip in the back of the Print Head Holder Assembly.

3. Lift the lever on the carriage assembly and unlock carriage.

4. Remove the corrugated cardboard tube.

5. Pull the wooden wedge from between the Floor Assembly and the Print Station Cover Assembly.
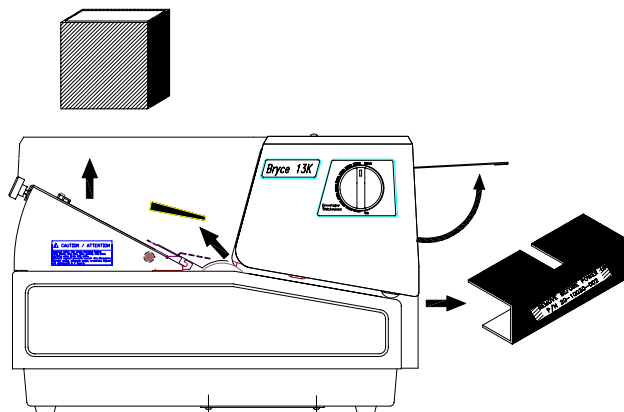
Installation of the Wire Frame Assembly

1. Move the Feed Ramp to the center of the Wire Frame Assembly.
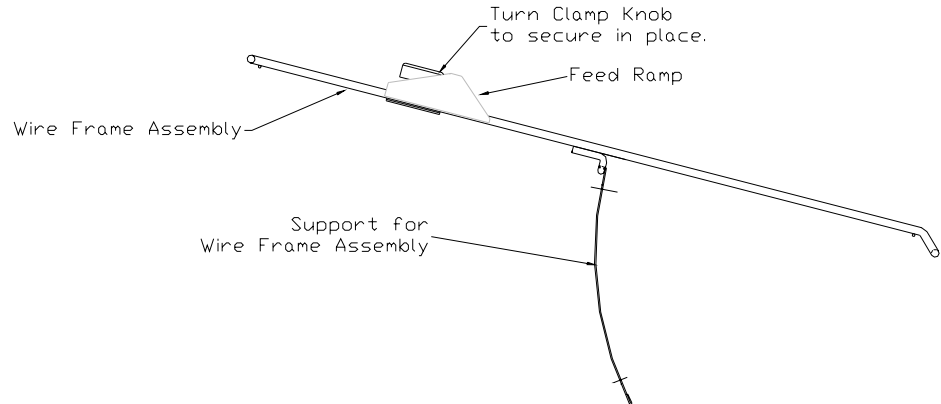
Position the Feed Ramp to the center of the Wire Frame Assembly and fasten in place.

2. Turn the Clamp Knob to secure in place.

3. Raise the Wire Frame to a vertical position.
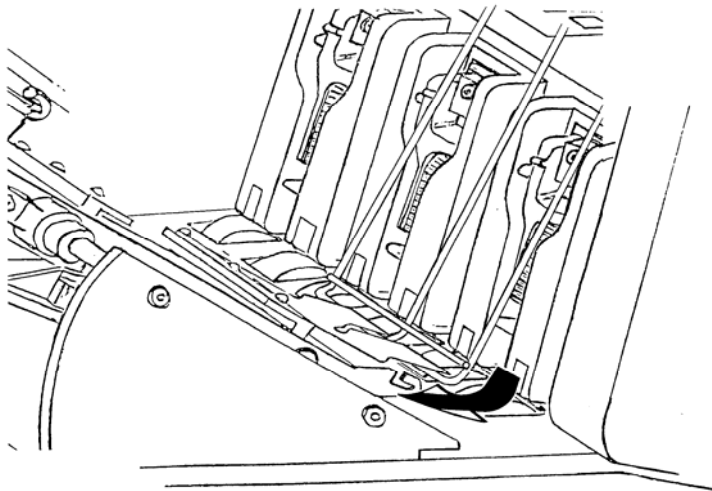
Press the Wire Frame Assembly into the rubber Feed Rollers to slide it beneath the paper deflector.

4. Insert wire Frame under deflector. Press wire Frame against rubber rollers to clear deflector plate.

Rotate Wire Frame Assembly between the carrage and the indicator arrow.
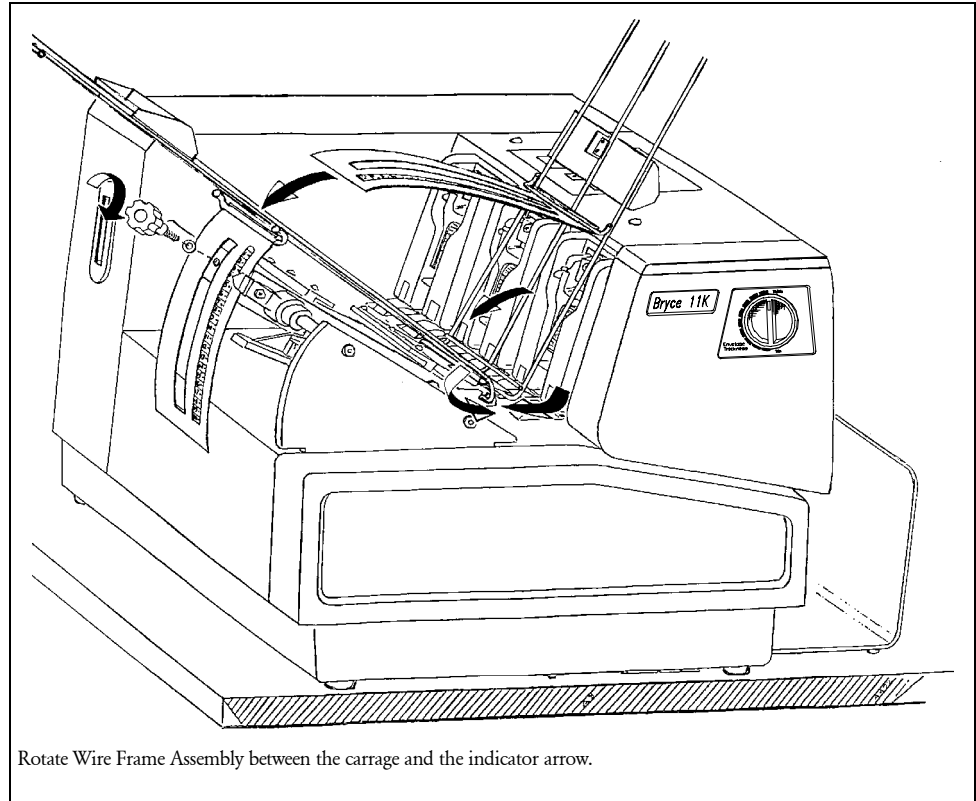
5. Verify the Wire Frame is locked into feed carriage grooves before clamp knob and washer is installed.

6. Turn the Clamp Knob on the Feed Carriage Assembly to hold the Wire Frame Assembly in place.

Installing the
Sliding Fence

Included in the Accessory Kit is a long and short Sliding Fence. The fences keep the media together in a stack. Use the short Sliding Fence for postcards and media up to the size of #10 envelopes. Use the Long Sliding Fence for all other sizes.

1. Locate the two long slotted Fence Retainer tabs on the Feed Carriage Assembly. This is where the Sliding Fence attaches to the printer.

2. Slide the rectangular shaped edge of the Sliding Fence between the two tabs.
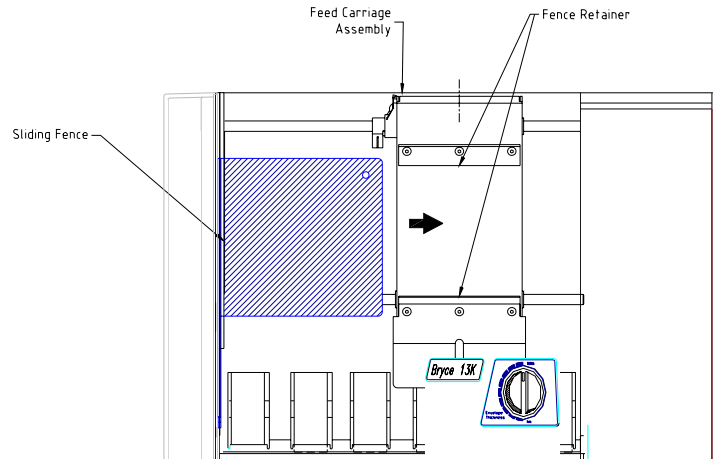
The drawing is shown without the Wire Frame Assembly for ease of illustration.
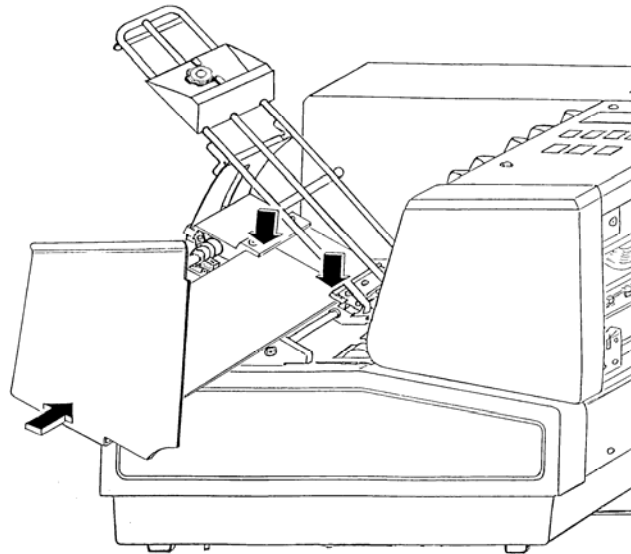
Connecting the Printer

Connect the Address Printer to either the serial port or parallel port of the computer. Initialize the Address Printers communications port by sending data to either the parallel or serial port. To change from the serial port to the parallel port or vice versa the printer must be reinitialized or manually changed through the Setup Menu. Doing otherwise may affect the operation and performance of the Address Printer.

Parallel Port
with wire clips

Serial Port
with Hex Jack screws

ON / OFF
Power Switch

Power receptacle
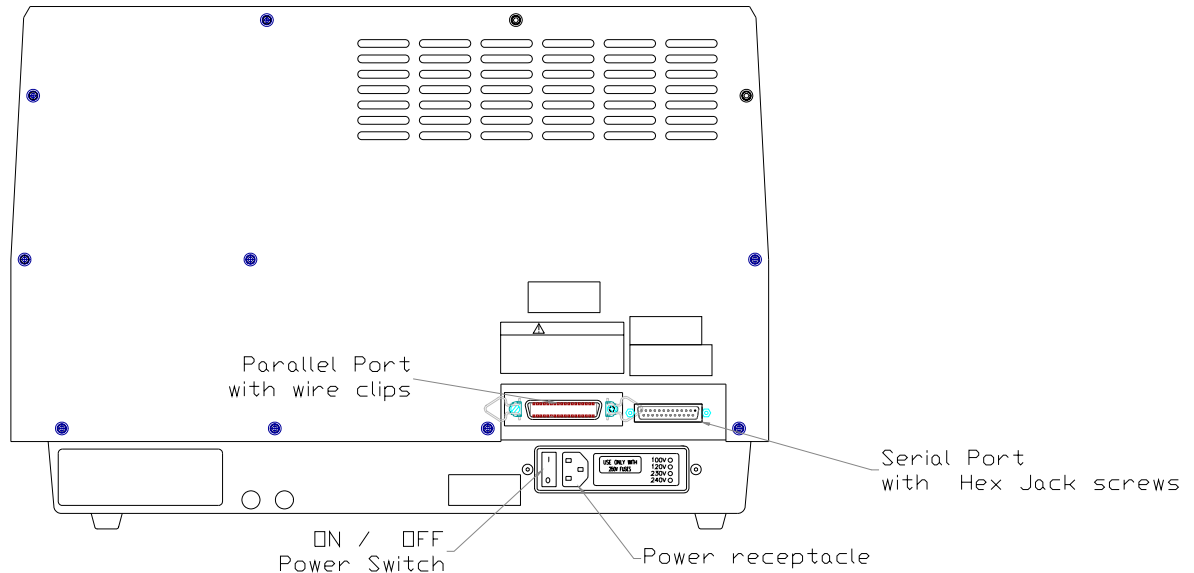
Note: AB switches are not recommended for operation with this printer.

To connect printer to the computer do the following steps.

1. Align the male end of the parallel or serial cable connector. Push the cable connector in.

2. Secure the cable in place. Use the two wire clips located Parallel connector to snap into the tabs on the connector. Use the thumb screws on the serial connector to screw into the hex jack screws on the Electrical Bracket.

3. Align the other end of the cable to the connector on the computer and push into the port.

4. Secure the cable in place. Use the thumb screws on the connector to screw into the hex jack screws on the computer.

Connecting the Power Cord

The power cord receptacle is located on the Pan Assembly along with the ON/OFF power switch. Connect the power cord to a grounded outlet.

1. Push the female end of the power cord into the power receptacle.

2. Plug the other end into a grounded power outlet.

Power On

The power cord is plugged in, the printer is connected to the computer. Now you can turn the power on.

· Press on the printers' ON/OFF power switch. The switch is located on the rear of the printer next to the line cord receptacle. Press on the symbol "I" (ON) position. The printer LCD menu will display the printer is initializing and will automatically go ON LINE.

```
          ON LINE
Ink = 100%        00 pcs
```
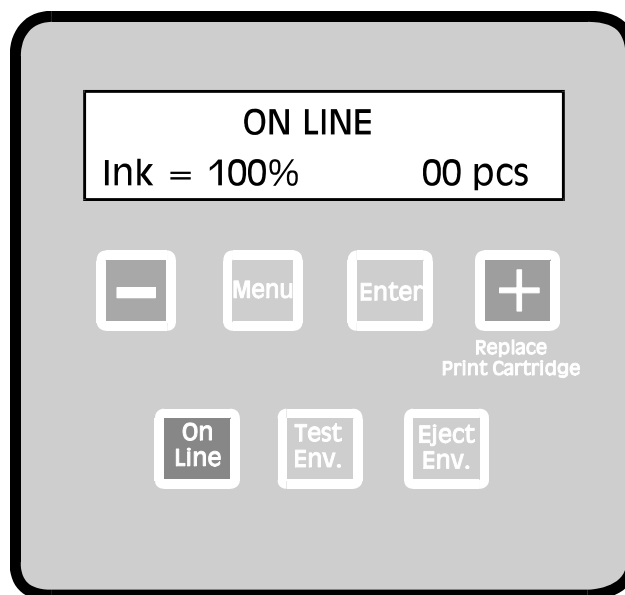
The Address Printer uses an Ink Jet Cartridge for printing. You must install the Ink Jet Cartridge before you use the machine. To install the cartridge do the following:

· Verify the LCD display message on the top line of the display is either OFF LINE or ON LINE.

· Open the front cover.

· On the top Control Panel, depress **Replace Print Cartridge** button (plus button) and the carriage will travel to the center position and stop. **DO NOT MOVE THE CARRIAGE BY HAND!!** Damage may occur to the carriage.

Installing an Ink Jet Cartridge

CAUTION
The ink in the print cartridge may be harmful if swallowed. Keep new and used cartridges out of reach of children. Discard empty print cartridges in the proper manner.

1. Remove Cartridge from the shipping container by peeling top cover off. Be careful not to touch the copper ribbon.
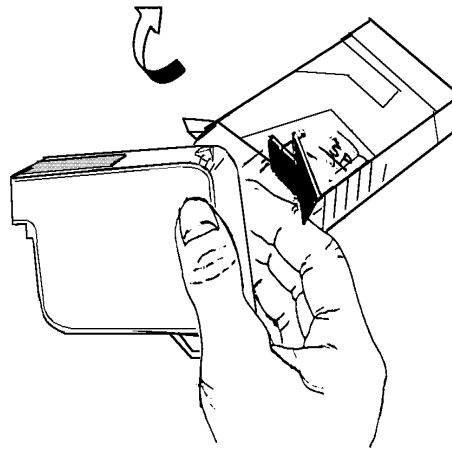
2. Gently remove both pieces of tape covering the ink nozzles on the print cartridge. Be careful not to touch the copper nozzles.

TAPE
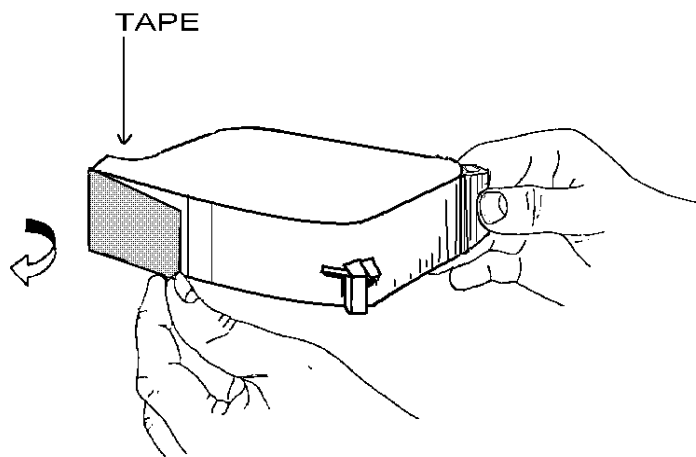
3. Hold cartridge from the notched handle on top of the cartridge. Gently insert cartridge down at approximately a 45 degree angle into the cradle of the Print Head Holder Assembly.
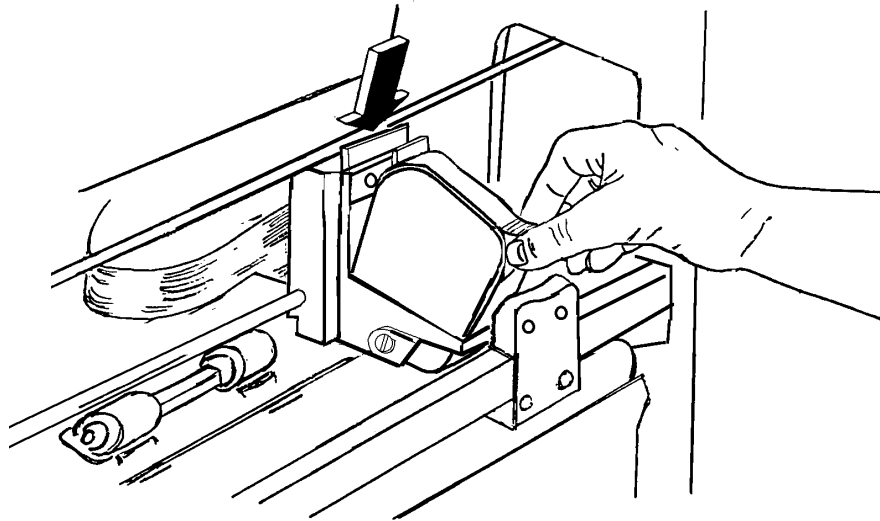
4. Hold the handle on top of the ink cartridge. Gently lift up on the handle until the cartridge snaps into place.
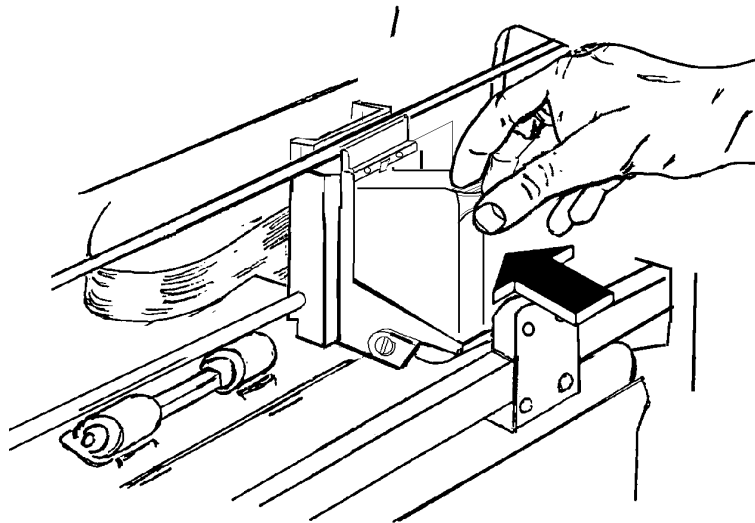
Removing an Ink Jet Cartridge

1. Grasp the handle on top. Press down on the cartridge handle until the cartridge "pops" loose and falls forward.
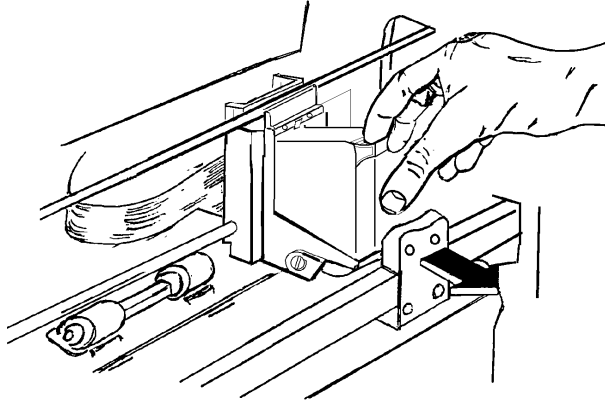
2. Lift the print cartridge out of the cradle.
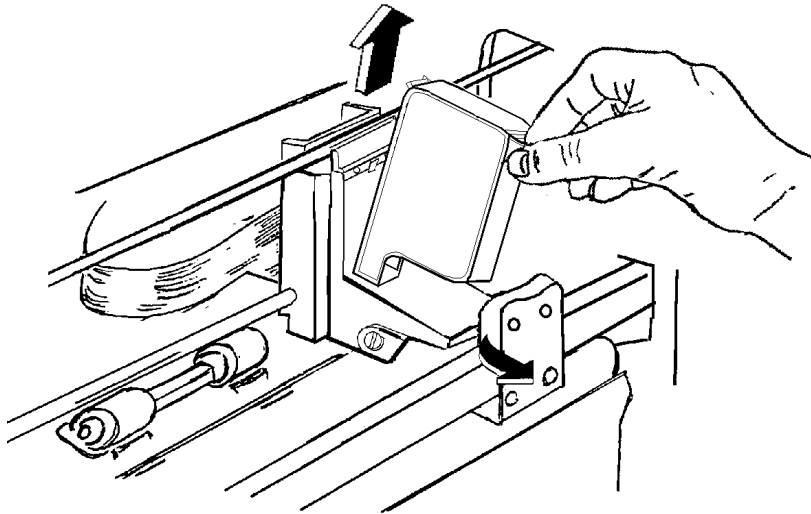
Preparing
the Media

Recheck that all the necessary components of the printer are installed.

- Is the Wire Form Assembly installed?
- Is the Sliding Fence installed?
- Is the printer plugged into a power outlet?
- Does the printer have an Ink Jet Cartridge installed?
- Is the printer connected to the computer?

Now that all the parts of the printer are installed the printer needs to be adjusted to work with the media. To avoid problems of misfeeding and jams the media must also be made ready for the printer.

Use the following steps to make the media ready for printing:

1. Take a manageable pile of media and while holding them (as shown below in reference A), "fan" all sides of the media to make sure that each piece of media is free from one another.

Note: Maximum thickness is 1/4" for the 13K.

2. Square the pile against the table top, assuring a square pile on all sides. (Reference B) This will also allow media to settle toward the bottom of a stuffed envelope and will increase the feeding capabilities of the printer.

Fan All Sides of Media   Square Media
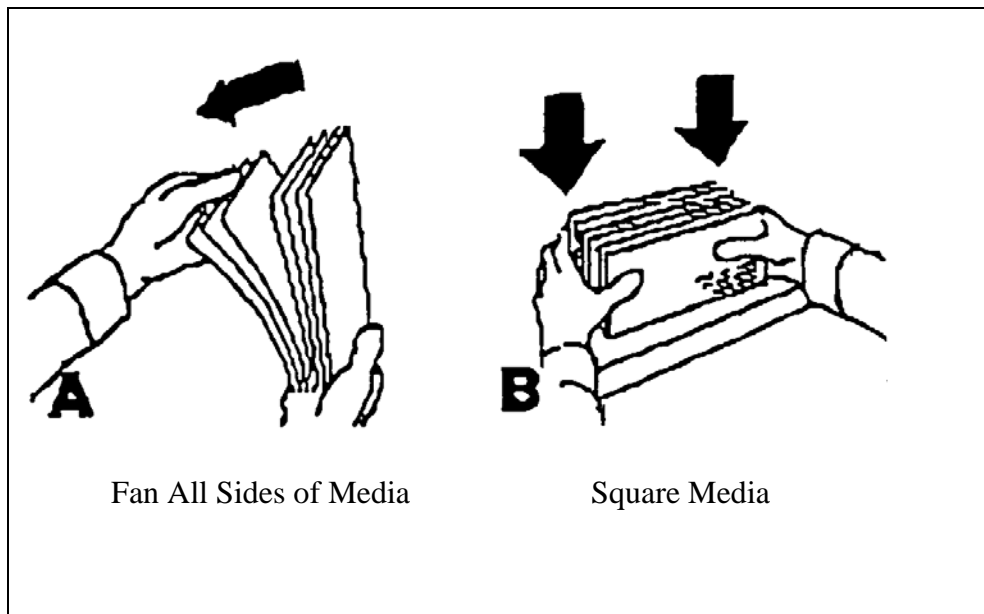
Media Types

The printer is designed to feed and print on a variety of media with various finishes and coatings. The sharpness of the print quality will vary with different media types, depending on how absorbent the media is, as well as other qualities. The best results can be achieved using white wove bonded stock. The printing quality will be less sharp on tyvek, recycled and glossy media.

The types of media the printer is able to use is:

- Envelopes: should be stacked to feed with the bottom edge first (non flap edge).
- Booklets: should be stacked with the sealed edge leading or stacked with the sealed edge placed parallel to the rear wall of the Rear Support Plate Assembly.
- Catalogs: should be stacked with the sealed edge leading or stacked with the sealed edge placed parallel to the rear wall of the Rear Support Plate Assembly.
- Postcards: must be 3.5" (7.62 cm) x 5" (12.7 cm) or larger.
- Self Mailers: may be folded in half or "C" or "Z". The media must be tabbed and not exceed the maximum allowable thickness.
- Paper: may consist of 16 to 80lb of uncoated to coated stock. The maximum width and height is specified in Appendix G.

All folded material and catalogs must be tabbed as per postal regulations.

The paper types that can be used are:

- White wove
- Bond Paper
- Recycled Paper
- Coated Paper
- Card Stock
- Brown Kraft
- Manila

Setting the proper feed gap

To start a print job the feed gap should be set for each type of media used in the printer. The feed gap is the spacing between the feed rollers and the separators. Set the feed gap with a piece media by following these procedures:

1. Lift the Latch Assembly to unlock and raise up the H-Block Assembly.

The three H-Blocks are shown shaded.
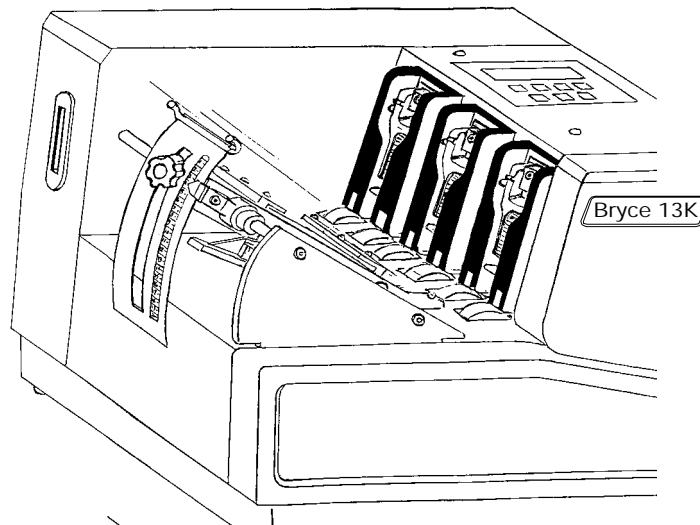
2. Unlock all three H Blocks on the Print Station Assembly.

Hint: set a smaller gap between the separators and feed roller, by using standard copy paper when using post cards.
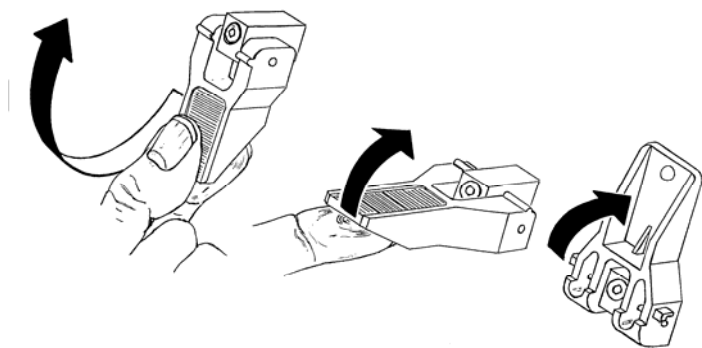
Raise Latch assembly to raise the H-Blocks.

3. Take a piece of the media and place between the Feed Rollers and the H-Block Assemblies.

4. Square the edge of the media against the registration wall of the Center Plate.

Place Media under separators
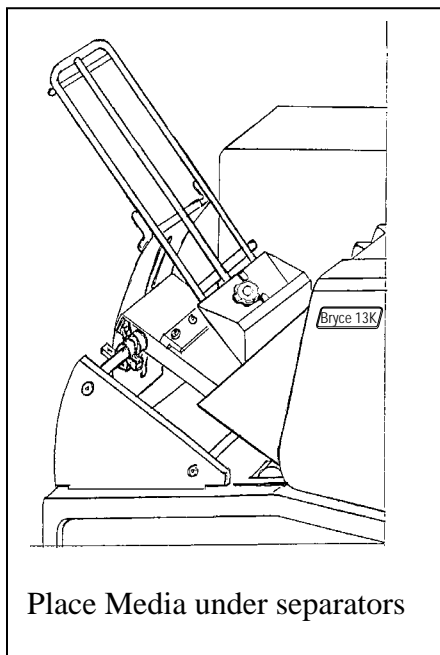
5. Push the Latch Assembly down and allow the H-Block Assemblies to drop on top of the media. Keep the H-Block Assembles up that won't contact the media.
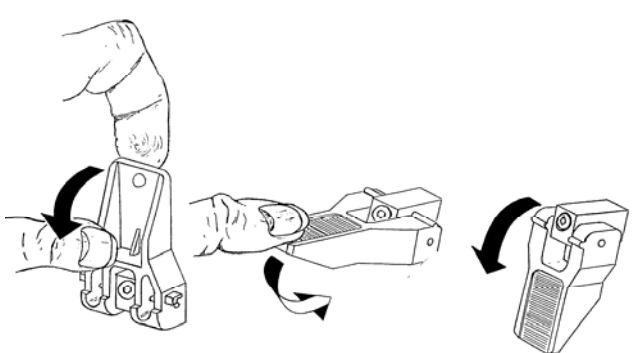
When just one of the separator fingers is in contact with the media use another piece beneath the other separator finger and the Feed Roller to set the feed gap.

6. Press the Latch Assembly all the way down to secure H-Block Assemblies in this position.

When the feed gap is not set correctly the printer will have feeding problems. When the gap is too wide double feeding

(feeding two or more pieces at a time) will occur. If the gap is to small the media will jam beneath the separators. If you followed the preceding steps and are experiencing feeding problem using post cards or stuffed media try the following:

Post cards - set a smaller gap between the H-Block Assemblies and the Feed Rollers. Try using a sheet of copy paper to set the feed gap.

Stuffed Media - set a larger gap between the separator blocks and the feed roller. Try adding two or three, number ten (# 10) envelopes, on top of the media before setting the separators.

Setup with #10 Envelopes

Perform the preceding steps for setting the feed gap using #10 envelopes. Notice that only two of the H-Block Assemblies completely rest on the envelope. The third H-Block has one separator finger on the envelope and one on the feed roller.

1. Take Sliding Fence off and remove out of the way.

2. Fit a second envelope between the other half of the H-Block Assembly and the Feed Roller.

3. Loosen the H Block Knob to let the H-Block Assembly fall freely onto the envelope. Verify envelopes are between all the Separators Fingers and the Feed Rollers.

4. Lock in place by tightening the H Block Knob.

5. The Input Bin can now be filled with #10 envelopes for printing. The stack of envelopes should be "shingled" or layered with the piece on top partially covering the piece below it like shingles on a roof. Load into the input bin with flap away from the feed roller and facing downward. Start with just a few envelopes to start the stack and get the angled contour of the bin area, then add several more pieces. Then add the remainder of the stack.

Wire Form Adjustments

The Wire Form assembly supports the media stacked in the input bin area and redistributes the weight of the media to assist in the feeding of the media. The Wire Form assembly has three basic adjustments.

- *Wire Form Center Adjustment* to eliminate skewing of the media and print.
- *Wire Form Height Adjustment* to allow the printer to feed media of varying density. **Example**: Rigid media is set low, light weight media is set high.
- *Wire Frame Ramp Adjustment* improves the feeding of media by distributing the weight of the media stack onto the feed roller.

Wire Form Center Adjustment

The Feed Carriage Assembly needs to be adjusted with the Wire Form Assembly.

1. Place a piece of the media in the bin area against the Center Plate Assembly.

2. Unlock Feed Carriage assembly by pushing locking

Adjust Feed Carriage
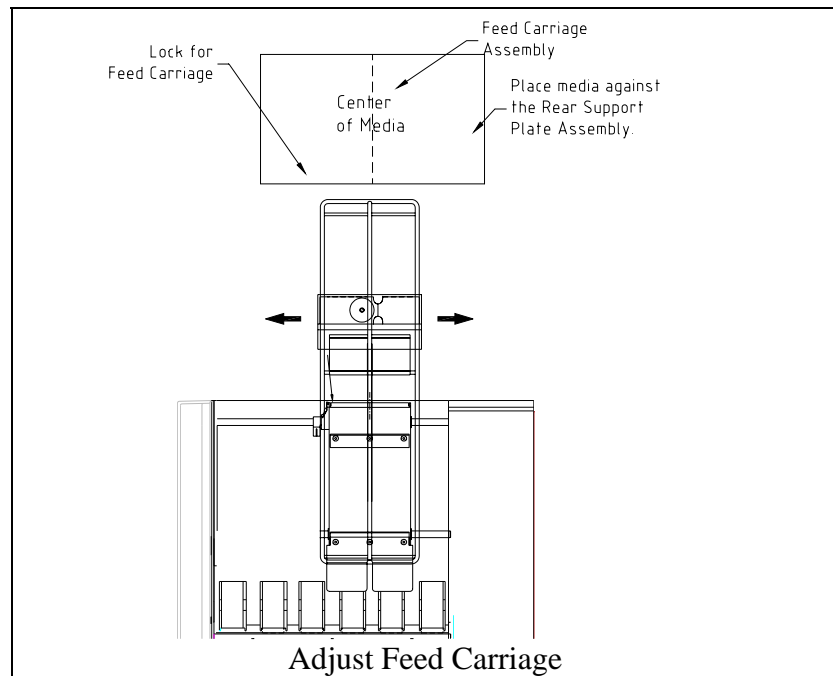
lever down

3. Slide Feed Carriage Assembly to the center of the media.

4. Pull lever up to lock Feed Carriage Assembly in place.

Wire Form Height Adjustment

The Wire Form Assembly helps the printer feed the media. Use the following suggestions as a guide for setting the height of the Wire Form Assembly. When the media is:

- *Heavy media-* set low
- *Light media* - set high.
- *Rigid media -* set low

To adjust the Wire Form Assembly:

1. Loosen the Carriage Knob on the Feed Carriage Assembly.

2. Move the Wire Form As

3. Tighten the Carriage Kn Assembly in place.

Fee Adj

Unlock Clamp Knob

Lock Clamp Knob

Adjust Wire Form
Assembly
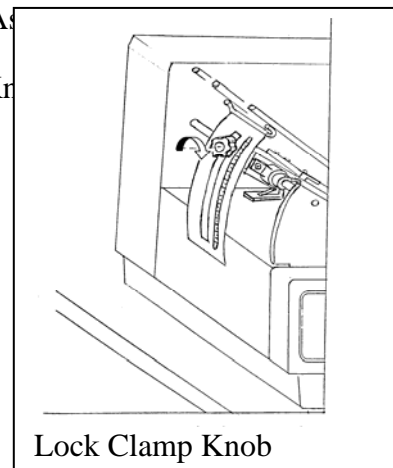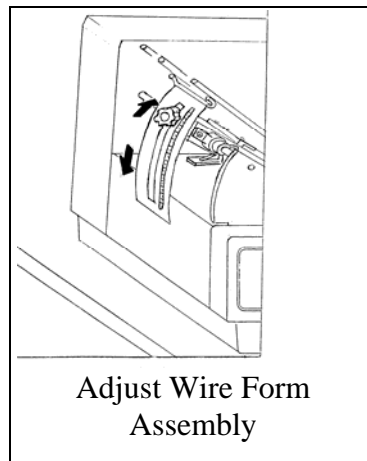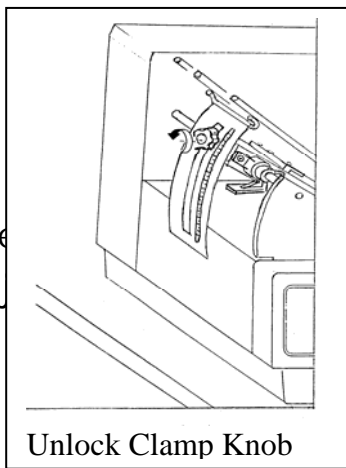
Adjust the Feed Ramp Assembly beneath the rear edge of the media by:

1. Loosen the Knob on the Feed Ramp Assembly.

2. Lower Feed Ramp beneath the back edge of the media.
   e media is halfway up the angled

   Feed Ramp into position.

Slide Ramp Towards
Media
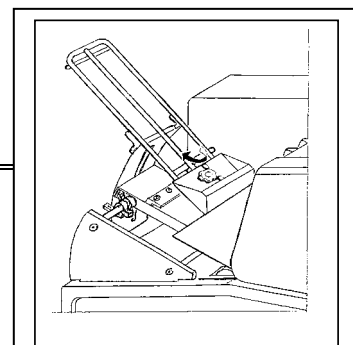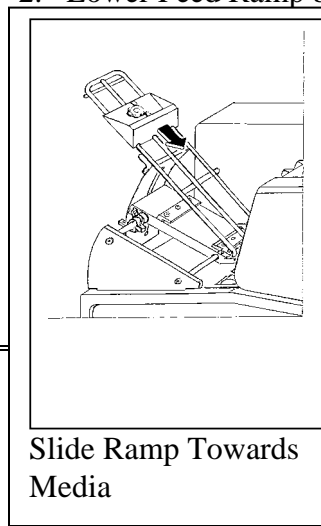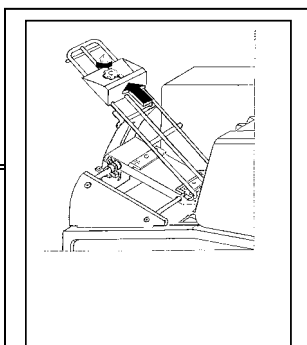
Sliding Fence Adjustment

Sliding Fence Installation: Insert Sliding Fence between slide guides and feed carriage

Recheck your setup and adjustments:

- Is the feed gap set?
- Is the Wire Form in the center of the media?
  - Is the Wire Form at a good height?
  - Is the Feed Ramp beneath the edge of the media?

Position the Sliding Fence before stacking the bin area with media. The fence has to be close enough to the media to keep it from going in at an angle and loose enough for the media to drop down to the Feed Rollers. To properly position the fence:

1. Place a handful of the prepared media in the input bin area.

2. Square the stack against the wall of the Rear Support Plate Assembly and the H-Block Assemblies.

3. Push the Sliding Fence in near the media. Leave a gap the thickness of one or two #10 envelopes. This size of gap places the fence close enough to prevent pieces from twisting and turning as they enter the printer, and the fence won't be to close to the media to trap and restrain the pieces between the fence and the wall of the Rear Support Plate Assembly. This would hinder the media from being fed into the printer.

4. To put the media into the bin, start with a few pieces to get the proper contour. The media stack should be "shingled" when loaded into the input bin with flap away from the feed roller and facing downward. Add several more pieces. Keep adding to the stack until the bin is full of media.
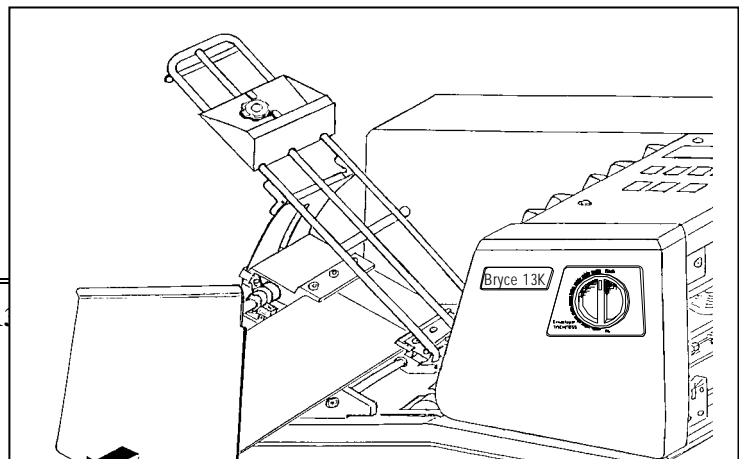
**Adjust the
Exit Roller
Sliders**

1. Typically adjust the Exit Roller Sliders, (1/4 of an inch) from the left and right edges of the media. Verify the Exit Roller Sliders do not contact any printed information on the media. If it does these will act as a brush with paint and smear the print. If this condition exists, adjust the Exit Roller Sliders toward the nearest clear zone (non printing area of the media).

**Output
Stack
Height**

1. The paper catch assembly will stack up to five (5) inches of media before it is necessary to remove the stack from the paper catch assembly. If the paper catch is not emptied regularly then there is the potential for out of sequence stacking , particularly when the printer is printing toward the top of the media.

Exit Roller Sliders

Increase Print Clarity by adjusting the print head height adjustment knob.
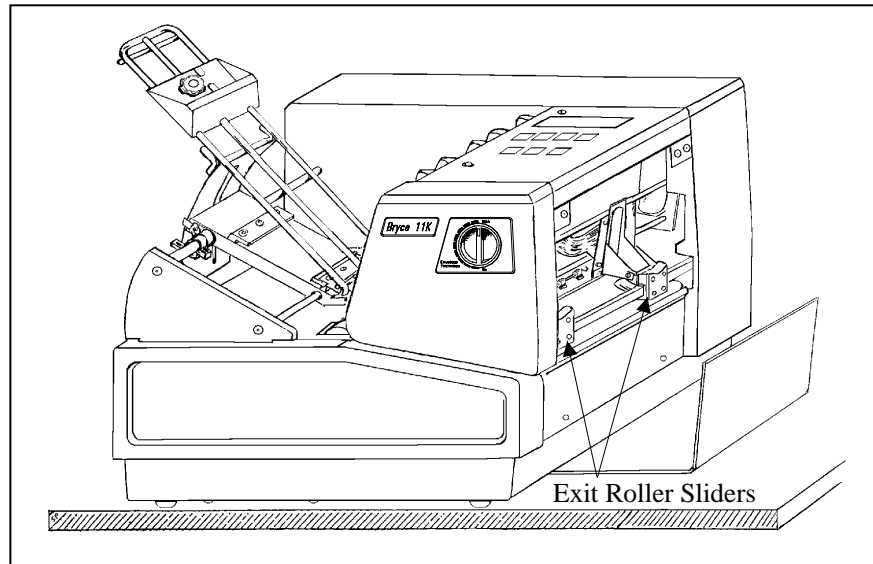
**Envelope
Thickness
Adjustment Knob**

1. Adjust the envelope thickness knob to the fully opened position: ¼ " Maximum, (turn the envelope thickness knob clockwise) reference Figure below.

2. While the printer is printing, close the Envelope Thickness Knob (turning counterclockwise) until the printed message smudges. Then back off the adjustment for the desired print quality.
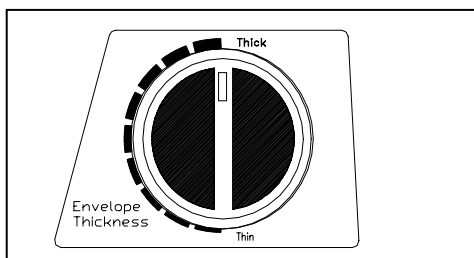
**Control Panel and
LCD Display**

The printer buttons on the control panel perform the following functions:

**KEYPAD
DEFINITIONS**

On
Line
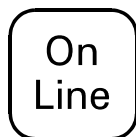
On Line button

Use this button to toggle the printer between ON LINE or OFF LINE.
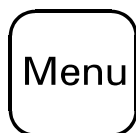
Menu

Menu button:

Press this button to go into the menus or to exit from the menus.

▬
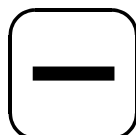
(Minus) button

Press this button, while in a menu, to scroll the menu features from bottom to top.

✚
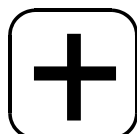
(Plus) button**:**

Press this button, while in a menu, to scroll the menu features from top to bottom.

Replace
Print Cartridge

**Replace Print
Cartridge** button:

When the printer is OFF LINE or ON LINE, press this button to make the print head holder travel to the center position of the print platen for easy access when removing or installing a print cartridge. Press again to return the print head holder.

Test
Env.

Test Env. button:

When the printer is OFF LINE, press this button to print an internal test address message.
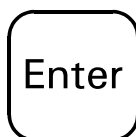
Enter

Enter button:

Press this button, while in a menu, to select a menu feature.

Eject
Env.

Eject Env.

Press this button to eject the piece of media under the exit sliders.

HOW TO USE THE MENUS

Conventions used in the Printer Menu System section.

Bold is used for the **Menu, On Line, Enter, + (Plus), - (Minus)** buttons when they must be pressed to program or operate the printer.

ALL CAPITAL LETTERS are used to highlight words that appear on the LCD display, and menu options: i.e. MAIN MENU, SETUP MENU.

Italics are used to define the function of the printers menu option.

Capitalized are used to denote the name of the menu option: i.e. Main Menu, Setup Menu.

Accessing the Menus

The printer has two menu directories to program the printer. These menus are displayed on the LCD panel located on top of the printer. The two menus available are the Main Menu and the Setup Menu. Some of the menu options contain several layers of sub-directories of menu options. To access the printers menus the LCD display must show OFF LINE. The following steps outline how to access the two menu directories.

- Press the **On Line** button until the LCD display shows "OFF LINE". Pressing the **On Line** button on the control panel will toggle the printer from ON LINE to OFF LINE and vice versa.

- To access the Main Menu depress the **Menu** button. MAIN MENU will be shown on the LCD display.

- To access the Setup Menu depress the **Menu** button for two (2) seconds, until SETUP MENU is shown on the LCD display.

  - Press the **+ (Plus)** or **- (Minus)** button to scroll through the options available in the Main Menu or the Setup Menu.

- Press the **Enter** button to choose the displayed option from the Main Menu or Setup Menu options.

- Press the **Menu** button several times to back out of the Main Menu or Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer displays ON LINE and is ready for use.

MAIN MENU

Using the Main Menu

Use the Main Menu level to choose the print specifications and page layout for your media. Select the desired option when it appears on the second line of the LCD. Note: An Asterisk (*) displayed before the menu option is an indicator of the current menu option setting. Selecting another menu option will install the asterisk before the option. Upon receipt of the printer from the factory the asterisk is typically the default setting.

These options are covered in the following pages.

1. ADDRESS LAYOUT

2. PRINT QUALITY

3. FONT

4. BARCODE

5. ADDRESS RECOVERY

6. CLEAR COUNTER

7. JOB SETTINGS

1. ADDRESS LAYOUT

Use this option to change the page layout for your mail piece. Use the following steps to access the Address Layout sub-menus.

- Press the **+** or **-** buttons to scroll through the Main Menu options until the 1. ADDRESS LAYOUT option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the 1. ADDRESS LAYOUT options.

  A. DISTANCE TO RIGHT

  B. DISTANCE TO BOTTOM

  C. LINE SPACING

D. ORIENTATION

E. ORIENTATION CNTRL. (CONTROL)

A. Distance to Right

Distance to Right is the distance measured from the right edge of the media to the first printable character.

See example.

Example:

Use the following steps to change the position of the record on the media.

- Press the **Enter** button to select this option.

- Press the **+** (MORE) or **-** (LESS) buttons to increase / decrease the distance to the right edge of the media.

- Press the **Enter** button to select the desired measurement.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

B. Distance to Bottom

The Distance to Bottom is the distance between the bottom edge of the media and the base of the first line of the address. Minimum distance between the bottom of the last line of the address and the bottom edge of the media is 5/8 inches (10.58mm). If less than 5/8 inches (10.58mm), the lower right barcode will not be printed.

Use the following steps to change the position of the record on the media.

- Press the **Enter** button to select this option.

- Press the + (MORE) or - (LESS) buttons to increase / decrease the distance from the bottom.

- Press the **Enter** button to select the desired measurement.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button, now the printer is ready for use.

C. Line Spacing

This sets the distance between lines of text. It is measured as the number of lines per inch of text. **Note**: Whenever changing the point size of the font, use the automatic line spacing option. The printer will automatically select the correct setting for the increased or decreased font size of the characters being printed.

Use the following steps to change the spacing between line of text.

- Press the **Enter** button to select this option.

- Press the + or - buttons to scroll through the line spacing options:

    A) AUTOMATIC

    B) 3 LINES / INCH

    C) 4 LINES / INCH

    D) 6 LINES / INCH

E) 8 LINES / INCH

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

D. Orientation

This changes the direction that the print appears on the media.

Use the following steps to select the orientation sub-menus.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the orientation options:

    A) NORMAL

    B) INVERT

a) Normal

When the Orientation is set to *Normal* the leading edge of the media is assumed to be the bottom with the right edge running against the side of the printer. These assumptions are necessary for a barcode to be printed on the lower right edge of the media/envelopes.

Use the following steps to set the direction of print on the media to Normal.

- Press the **Enter** button to select this option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

b) Invert

Setting the Orientation to *Invert* notifies the printer that the top of the media now enters and exits first, and that the media left edge will run along the side of the printer. Selecting this option automatically alters the printer's *1.*

ADDRESS LAYOUT options (*A. Distance to Left, B. Distance to Top*). Note: Whenever the Invert option is selected the lower right barcode feature is disabled. The reason for this, is that the edge of the lower right hand side of the media is unknown.

Use the following steps to set the direction of print on the media to Invert.

• Press the **Enter** button to select this option.

• Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

• Press the **On Line** button; now the printer is ready for use.

E. ORIENTATION CNTRL. (CONTROL)

This option allows the printer to ignore the orientation commands sent by the computer.

Use the following steps to select the orientation control sub-menus.

• Press the **Enter** button to select this option.

• Press the + or **-** buttons to scroll through the orientation options:

 A) AUTOMATIC

 B) MANUAL

a) Automatic

When the Orientation Control is set to *Automatic* the printer acknowledges the orientation commands sent from the computer.

Use the following steps to set the direction of print on the media to Automatic.

• Press the **Enter** button to select this option.

• Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

• Press the **On Line** button; now the printer is ready for use.

b) Manual

Setting the Orientation to *Manual* notifies the printer to use the menu settings for orientation. Use the following steps to set the orientation control of the printer to Manual.

- Press the **Enter** button to select this option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

2. PRINT QUALITY

This option changes the speed of the printer and the density of the characters printed on the media.

Use the following steps to select the Print Quality sub-menus.

- Press the **+** or **-** buttons to scroll through the Main Menu options until the 2. PRINT QUALITY option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the 2. PRINT QUALITY options.

  A. EXECUTIVE

  B. LETTER

  C. DRAFT

A. Executive

Executive quality is used for documents that require a professional appearance. This is the darkest of the three print qualities, the slowest print speed and uses the most ink.

Use the following steps to change the quality of print to black.

- Press the **Enter** button to select this option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

B. Letter

Letter quality is used for documents that require a finished, polished appearance.

Use the following steps to change the quality of print to dark gray.

- Press the **Enter** button to select this option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

C. Draft

Draft quality prints documents the fastest and saves ink. This option offers the highest print speed and prints the lightest of the three print qualities. Use the following steps to change the quality of print to light gray.

- Press the **Enter** button to select this option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

3. FONT

Use this option to alter the fonts characteristics: typeface, point size, spacing, stroke weight, and style.
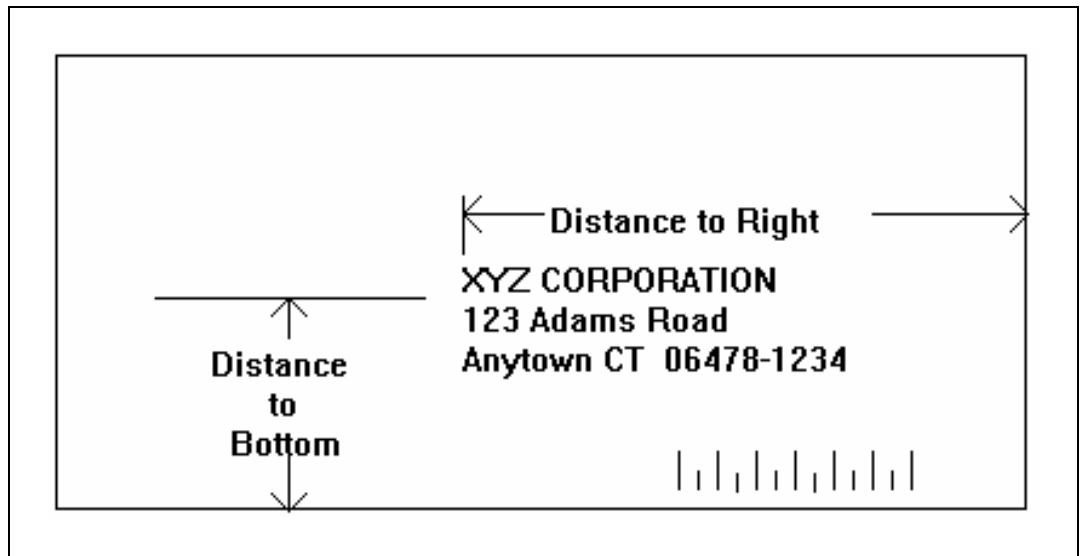
Use the following steps to select the Font sub-menus.

- Press the **+** or **-** buttons to scroll through the Main Menu options until the 3. FONT option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the 3. FONT options.

  Note: When *A. NAME* is shown on the display as a Menu option, press the **Test** button and a complete listing of the available fonts will be printed out in their typeface.

  A. NAME

  B. SIZE

  C. WIDTH

  D. BOLD

  E. ITALIC

  F. OUTLINE

A. Name

There are twelve internal distinct typefaces available with the printer. A typeface is the unique design of finishing strokes and serifs of a character set.

> **Note:** Press the **Test** button when a font name is displayed on the LCD. A list of the character set is printed in the fonts typeface. Use these same steps to print a character set from a font card.

Many optional fonts are available by installing an optional font card. The Font card must be installed (Font label facing the front of the printer). Turn the printer power off for 10 seconds or more. Insert the font card, then power on the printer to use the external font card.

Use the following steps to change the typeface of the font.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the A. Name options until the desired selection is displayed on the LCD panel.

  a) COURIER

  b) SAN SERIF

  c) ROMAN

  d) BAXTER

  e) DINGBAT

  f) HANCOCK

  g) MARINA

  h) QUINCY

  i) SILICON

  j) SPRINGER

  k) STENCIL

  l) WINDMILL

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

B. Size

The font Size (internal or external) can be set from 4 to 30 point. Font sizes up to 30 Point can be downloaded from Microsoft Windows™ to the 13K Address Printer (one inch equals 72 point). The point size of this text is 12 point.

Use the following steps to change the size of the font.

- Press the **Enter** button to select this option.

- Press the + or **-** button to select + LARGER (increase the point size increases the character height) or - SMALLER point size.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

Example:

This is a test message in 8 point.

This is a test message in 12 point.

This is a Roman Text in 20 point.

Courier Text in 30 point.

C. Width

Use this option to change the width of spaces between characters and the width of characters. ***Normal (100%)*** print width is the standard width of characters and spaces between characters. Settings of Thin (75%) and Condensed (50%) will decrease the spacing between characters and decrease the width of characters. The settings of Wide (125%) and Expanded (150%) increase the width of characters and spaces.

Use the following steps to change the spacing and width of the font.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the C. Width options.

a)	CONDENSED	(50%)
b)	THIN	(75%)
c)	NORMAL	(100%)
d)	WIDE	(125%)
e)	EXPANDED	(150%)

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

D. Bold

This increases the character stroke weight (thickness of print). Bold is used to emphasize or highlight text in an address.

Use the following steps to bold the font.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the D. Bold options: ON or OFF.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

E. Italic

This refers to the *oblique shape* of a character and is used to emphasize text in an address.

Use the following steps to change the font to italic.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the E. Italic options: ON or OFF.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

F. Outline

Use this option to print only the outline or the edge of the fonts shape. All the records printed using Outline will appear as *hollow text*. The Outline option will emphasize text in an address.

Use the following steps to print the font outline.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the F. Outline options: ON or OFF.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

4. BARCODE

Use this option to position the barcode or to choose not to include a barcode on the piece of media.

- Press the **+** or **-** buttons to scroll through the Main Menu options until the 4. *BARCODE* option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the options.

    A. LOCATION

    B. 5 DIGIT ON/OFF

A. Location

Use this option to disable printing the barcode or to select where to print the US Postal Service Postnet Barcode.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the *Location* options.

   a) LOWER RIGHT CORNER

   b) ABOVE ADDRESS

   c) BELOW ADDRESS

   d) OFF

a) Lower Right Corner

Use this option to print the barcode on the lower right edge of the media. Note: This option is disabled when the selected Orientation is Invert.

- Press the **Enter** button to select this option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

b) Above Address

Use this option to print the barcode in the address block above the first line of the address on the media.

- Press the **Enter** button to select this option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

c) Below Address

Use this option to print the barcode below the last line of the address in the address block on the media.

- Press the **Enter** button to select this option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

d) Off

Use this option to stop the printing of a Delivery Point Barcode (DPBC) on the media.

- Press the **Enter** button to select this option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

B. 5 Digit On / Off

Use this option to print a 5 Digit barcode for a five digit zip code. Note: Only a 5 Digit barcode is printed for a five digit zip code when enabled. A Delivery Point Bar Code cannot be generated from a five digit zip code.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the *5 Digit On / Off* options of ON or OFF (default setting is OFF). If enabled (On) a 5 digit zip code will be printed.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

5. ADDRESS RECOVERY

If something goes wrong while printing use this option to direct the printer to re-print up to 20 of the last records or to clear the printers memory of all records.

- Press the **+** or **-** buttons to scroll through the Main Menu options until the 5. ADDRESS RECOVERY option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the *Address Recovery* options.

> A. GET ADDRESSES
>
> B. CLEAR MEMORY

A. Get Addresses

Use this option to retrieve up to 20 records from the data buffer.

- Press the **Enter** button to select this option.

- The display will say 00: and show the first 16 characters of the last address printed. Press the **Enter** button to select the record and advance the display to the next to last record. Keep on pressing the **Enter** button to continue advancing back through the records and to select the displayed records. NONE TO RECOVER is displayed when no more records are able to be retrieved. If NONE TO RECOVER is first displayed then the data buffer is empty.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use. Note: The recovered records will print once the printer is ON LINE.

B. Clear Memory

Use this option to remove any data left in the data buffer.

- Press the **Enter** button to select this option.

- Press the **+** (YES) button to clear the printers memory or press the - (NO) button if you do not wish to clear the address data from the memory.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

Use this option to clear the piece (batch) counter.

6. CLEAR COUNTER

- Press the **+** or **-** buttons to scroll through the Main Menu options until the 6. CLEAR COUNTER option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** (YES) button to reset the counter to zero or press the - (NO) button to leave the current number of pieces printed (PCS) on the LCD display.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

7. JOB SETTINGS

The printer has the ability to save or load up to eight different menu presets in memory. This is extremely useful for a quick setup of the printer for redundant tasks.

- Press the **+** or **-** buttons to scroll through the Main Menu options until the 7. JOB SETTINGS option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the 7. JOB SETTINGS options.

    A. LOAD

    B. SAVE

A. Load

This option is selected to retrieve the menu settings from a previous job setup.

- Press the **Enter** button to select this option.

- Press + **MORE** or - **LESS** to increase or decrease the desired job number.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

B. Save

This option saves the current menu setup. The menu configuration is saved as a job number (1 through 8). The operator must keep a record of these configurations and the job number that was assigned.

- Press the Enter button to select this option.

- Press + MORE or **-** LESS to increase or decrease the desired job number.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Main Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

SETUP MENU

Using the Setup Menu

The Address Printer has a Setup Menu level that lets you configure the Address Printer so it will function correctly with the computer and computer software. Use the Setup Menu level to also render the menus in another language besides English. Hold down the **Menu** button for two (2) seconds until SETUP MENU is displayed on the first line of the LCD. Select the desired menu option when it appears on the second line of the LCD.

These options are covered in the following pages.

1. HEAVY MEDIA MODE

2. TEST PRINT HEAD

3. PURGE PRINT HEAD

4. LINES PER ADDRESS

5. COMMUNICATIONS

6. HEX DUMP MODE

7. LANGUAGES

8. ENV. FEED DELAY

9. ENV. AUTO EJECT

10. ROM REVISION

1. HEAVY MEDIA MODE

If the media stack exceeds 10 pounds (4.54 kg), use this option to increase the force used to feed the media. Whenever the transport motor torque is increased the media throughput will decrease approximately 10%.

Use the following steps to change the transport motor torque.

- Press the **+** or **-** buttons to scroll through the Setup Menu options until the 1. HEAVY MEDIA MODE option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the options of ON or OFF.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

2. TEST PRINT HEAD

Before using this option, verify the media is loaded in the input bin so a test pattern can be printed. A diagonal line will print across the media with a small solid box. If a gap is present within the diagonal line, one or more nozzles of the ink jet cartridge maybe blocked and need to be cleaned. Clean the ink jet cartridge by performing a purge (see menu option below). If the purge does not clear the nozzles, then remove the Ink Jet Cartridge. See chapter 4 on how to remove and install an ink jet cartridge. Clean the nozzles with a dry soft cotton cloth or one moistened with water.

Use the following steps to test the ink jet cartridge.

- Press the **+** or **-** buttons to scroll through the Setup Menu options until the 2. TEST PRINT HEAD option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- The LCD will display *Print a test pattern*? Press the **+** (YES) button to print the test pattern or press the - (NO) button to disable this option.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

3. PURGE PRINT HEAD

The purge process fires all the ink jet nozzles to dislodge and clear any dried ink on the print nozzles. Often this will return the print quality to a normal level.

Use the following steps to clean the ink jet cartridge nozzles.

- Press the **+** or **-** buttons to scroll through the Setup Menu options until the 3. PURGE PRINT HEAD option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** (YES) button to clear the ink jet nozzles or press the - (NO) button to disable this option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

4. LINES PER ADDRESS

Set the number of lines of text the record will consist of when printing onto the media. The printer has a range of 1 to 66 lines.

Use the following steps to change the printers number of lines.

- Press the **+** or **-** buttons to scroll through the Setup Menu options until the *4. LINES PER ADDRESS* option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the + button (MORE) or **-** button (LESS) to match the number of lines being sent to the printer.

   Note: Setting the number of lines on the printer is analogous to a typewriter; figure 6 lines per inch of text will be printed with single spacing enabled. If double spacing is enabled then figure 3 lines per inch of text will be printed.

   Commonly used settings:

   3 to 8 lines of text are commonly used for addresses.

   66 lines of text are typical of a 8 ½" (21.59cm) X 11" (27.94cm) page document.

60 lines of text are typical of 8 ½" (21.59cm) X 11" (27.94cm) page document with a 1/2" (1.27 cm) top and 1/2" (1.27 cm) bottom margin.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

5. COMMUNICATIONS

Transmitting data from the computer to the printer is through the parallel port (parallel interface) or the serial port (serial interface). The printer will automatically determine the selection of either the SERIAL or PARALLEL interface after the printer has received data from the computer. When the computer uses the printers Parallel interface no communication settings are required.

When the Serial interface is utilized the Communications menu settings must be configured to match the computer settings. The computer and printer must send and receive using the same configuration. Since computers typically send data faster than a printer can print, a "handshaking protocol" is employed to prevent the printers buffer from overflowing (communication overrun) and losing data. Set the computer to use one of the two methods of handshaking with the printer: DTR (hardware) or XON/XOFF (software).

The following sub menus are used to change the printer serial communications (baud rate, parity, word length) to match the computers. Note: The current settings of the *SERIAL* menu are shown to the right on the LCD display.

Use the following steps to select the Serial communications options.

- Press the **+** or **-** buttons to scroll through the Setup Menu options until the 5. COMMUNICATIONS option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the options:

  A. BAUD RATE
  B. PARITY
  C. WORD LENGTH
  D. LINE TERMINATION

A. Baud Rate

Use the following steps to change the serial communications Baud Rate.

- Press the **Enter** button to select this option.

- Press the + or - buttons to scroll through the Baud Rate options.

  a) 1200 BAUD   d) 9600 BAUD

  b) 2400 BAUD   e) 19200 BAUD

  c) 4800 BAUD

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

B. Parity

Use the following steps to change the serial communications Parity.

- Press the **Enter** button to select this option.

- Press the + or - buttons to scroll through the options.

  a) ODD

  b) EVEN

  c) NONE.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

C. Word Length

Use the following steps to change the serial communications word length.

- Press the **Enter** button to select this option.

- Press the + or - buttons to scroll through the options.

    a) 7 DATA BITS

    b) 8 DATA BITS

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

D. Line Termination

The typical software line termination is CR = CR**;** LF = LF. If your software is not typical then the Line Termination can be modified.

Use the following steps to change the line termination.

- Press the **Enter** button to select this option.

- Press the + or - buttons to scroll through the D. LINE TERMINATION options.

    a) (CR = CR; LF= LF)

    b) (CR = CR+LF**;** LF = LF)

    c) (CR = CR**;** LF = CR + LF)

    d) (CR = CR + LF**;** LF = CR + LF)

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

• Handshaking Protocol

The Address Printer uses two methods of sending serial data, XON/XOFF and DTR. The XON/XOFF software handshaking uses only three wires of the cable, pins 2, 3 and 7. Software handshaking is performed by the printer when the buffer is nearly ready to overflow. When the buffer has room for only 100 more characters, the printer sends the host an XOFF (ASCII DC3) character to signal it to stop data transmission. The printer continues printing making more room in the buffer. When the buffer has room for 150 more characters, the printer sends the host an XON (ASCII DC1) character to resume data transmission.

DTR is hardware handshaking in the Address Printer. The printer uses a dedicated wire DTR (pin 20) for signaling the host to start or stop data transmission. The printer accepts data from the host until it has room for only 100 more characters. The printer turns off DTR to the host device, indicating it to stop data transmission. The printer continues printing making more room in the buffer. When the buffer has room for 150 more characters, the printer turns on DTR, enabling the host to resume data transmission.

• Establishing Communications for IBM compatible DOS systems

The MODE command must be entered each time the computer is turned on or it can be put into the autoexec.bat file for auto loading. This command directs communications to the parallel port and sets the computer for infinite retries so the computer does not "time-out" while waiting for the printer to print. The message "INFINITE RETRY ON PARALLEL PRINTER TIME-OUT" will appear on your screen.

Use the following command for a Centronics Parallel Interface.

- Type: **MODE LPT1:,,P** and press ENTER

Use the following command for an RS-232-C Serial Interface (at 9600 baud, no parity, 8 bits, 1 stop bit and continuous retry on all time outs).

- Type: MODE COM 1:9600,N,8,1,P and ENTER.

• Verifying Communications

- To verify that the computer and the printer are communicating, make sure the printer is on-line, type **DIR>PRN** and press ENTER.

6. HEX DUMP MODE

Utilize this option to print the raw ASCII data (HEX Code) that is being sent to the printer. This is very useful when troubleshooting computer (software) installation problems.

Each line printed in HEX DUMP MODE is divided into two sections: The left hand side is the Hex Code sent to the printer and the right hand side is the ASCII Characters that are assigned to the HEX Code. All dots (periods) depicted on the right hand side of the ASCII Characters are unprintable printer commands or printer characters i.e. spaces, backspace, line feed, etc.

Hex Code appears as alpha-numeric pairs that range from [00] to [FF]. Reference the HEX chart in Appendix B for review. The HEX codes printed can be understood by knowing four HEX Codes:

numerals are represented by *30's* (*0* is [*30*] HEX, *1* is [*31*] HEX, etc.)

Carriage Return (CR) is [*0D*] in HEX

Line Feed (LF) is [*0A*] in HEX

Form Feed is [*0C*] in HEX

To review the records printed in HEX DUMP MODE organize the printed HEX Code in ascending order using the initial two digits of the first line on each piece. The first piece will begin with the number 00, then 01, 02, etc. Look through each line of HEX Code to find the start of the next address or until a [0C] form feed is encountered. A form feed [0C] will always be found as the last HEX Code printed on the piece.

Note: The media width must be a minimum of 7 1/2" or 191 mm when running in HEX Mode. The page orientation, margins and number of lines are defined by the *ADDRESS LAYOUT* and *LINES/ADDRESS*.

Example:

<u>HEX CODE Printed</u>	<u>ASCII DATA Sent</u>

```
00
00 01 02 03 40 41 42 04 05 06 07 08 30 31 32 33   ....@ABC.....0123
0A 0D 61 62 63 31 32 33 20 20 10 11 40 41 42 0C   ..ABC123....@abc.
```

Use the following steps to print the ASCII data being sent to the printer.

- Press the **+** or **-** buttons to scroll through the Setup Menu options until the *6. HEX DUMP MODE* option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the *6. HEX DUMP MODE* options of ON or OFF.

Note: Turning the printer off then on again clears the data buffer and shuts off the HEX DUMP MODE.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use. Note: **Clear the data buffer before sending data to the printer.**

7. LANGUAGE

Customize the printer to match the keyboard of your printer, convert measurements from inches to millimeters and translate the menus from English. Use the following steps to customize the printer.

- Press the **+** or **-** buttons to scroll through the Setup Menu options until the *6. LANGUAGE* option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the *7. LANGUAGE* options.

A. SYMBOL SET

B. INCH / MILLIMETER

C. MENU LANGUAGE.

A. Symbol Set

The printer has International Standard Organization (ISO) language symbol sets to use when printing in another language. A symbol set contains collections of the symbols and characters that make up a language. Use the following steps to match the printers' symbol set to the software.

- Press the **Enter** button to select this option.

- Press the + button or **-** button to view the International Standards Organization (ISO) symbol sets and substitution tables. Note:

a) ISO 6 ANSI ASCII	i) ISO 61 NORW / DAN
b) ISO 69 FRENCH	j) ISO 10 SWED / FIN
c) ISO 21 GERMAN	k) ISO 16 PORTUGUESE
d) ISO 4 UK	l) ISO 8859
e) ISO 60 NORW / DAN	m) ROMAN 8
f) ISO 11 SWED / FIN	n) WINDOWS LATIN 1
g) ISO 15 ITALIAN	o) PC 8
h) ISO 17 SPANISH	

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

B. Inch / Millimeter

This option converts the printer measurement system from inches to millimeters. Use the following steps to convert the printer measurement system from inches to millimeters and vice versa.

- Press the **Enter** button to select this option.

- Press the + button or **-** button to scroll through the options of Inch or Millimeters.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

C. Menu Language

This option will convert the Main Menu and Setup Menu to their translations in the following languages. Use the following steps to change the menu language.

- Press the **Enter** button to select this option.

- Press the + button or **-** button to scroll through the Menu Language options.

  a) ENGLISH
  b) GERMAN
  c) FRENCH
  d) ITALIAN
  e) SPANISH
  f) DUTCH
  g) POLISH

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

8. ENV. FEED DELAY

This option may be required to extend drying time for the ink when printing on very glossy media. This option reduces the overall throughput by increasing the time before the next piece is printed. Use the following steps to change the time between printing records.

- Press the **+** or **-** buttons to scroll through the Setup Menu options until the *8. ENV. FEED DELAY* option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the + button (MORE) or **-** button (LESS) to increase or decrease the amount of time before the next piece is drawn from the input bin. The time delay can be set from 0.0 to 30 seconds.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

9. ENV. AUTO EJECT

Use this option to automatically eject the last envelope in your file. Use the following steps to eject a blank piece of media between batch jobs.

- Press the **+** or **-** buttons to scroll through the Setup Menu options until the *9. ENV. AUTO EJECT* option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

- Press the **+** or **-** buttons to scroll through the options of ON or OFF. When this option is enabled a blank envelope will be ejected between batch jobs.

- Press the **Enter** button to select the desired option.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

- Press the **On Line** button; now the printer is ready for use.

10. ROM REVISION#

This option is extremely useful whenever it is necessary to verify the Firmware Revision installed in the printer (i.e. for CASS certification) or to determine if your printer requires an upgrade. This also displays the total number of accumulated print cycles (maintenance count) which is information that can help to determine solutions to printer problems. Use the following steps to view this menu.

- Press the **+** or **-** buttons to scroll through the Setup Menu options until the *10. ROM REVISION* option is displayed on the LCD panel.

- Press the **Enter** button to select this option.

     The LCD will display will give a momentary view of the Rom Revision and the Maintenance count. **Note:** Press the **Test** button when ROM REV. is displayed on the LCD. A list of the Main Menu and Setup Menu settings is printed on two pieces of media.

- Press the **Menu** button several times to back out of the Setup Menu until the printer displays OFF LINE.

. Press the **On Line** button; now the printer is ready for use.

Preventative Maintenance:

The 13K Printer is designed for trouble free service with a minimal amount of care. Cleaning of the Feed Rollers, Right Hand Slider, Left Hand Slider and Lower Guide assembly will be necessary.

CAUTION!!

CLEAN INK JET CARTRIDGE, INK SURFACES AND COVERS WITH PLAIN WATER.

ALL RUBBER ROLLERS CAN BE CLEANED WITH ISOPROPYL, DENATURED & RUBBING ALCOHOL OR WATER ONLY.

USING ANY OTHER CLEANING SOLVENTS WILL VOID ALL WARRANTIES.
                Keep cleaning solvents with petroleum based products from rubber or plastic parts.
Anything but ALCOHOL or WATER will cause premature breakdown of rubber compound.

Cleaning the Feed Rollers

Lint and paper dust will tend to build up on the feed rollers over use. Clean rollers when they are glazed or have a yellowish residue. Use alcohol to dampen a soft cotton cloth to clean all rubber rollers.

Feed Roller Assembly
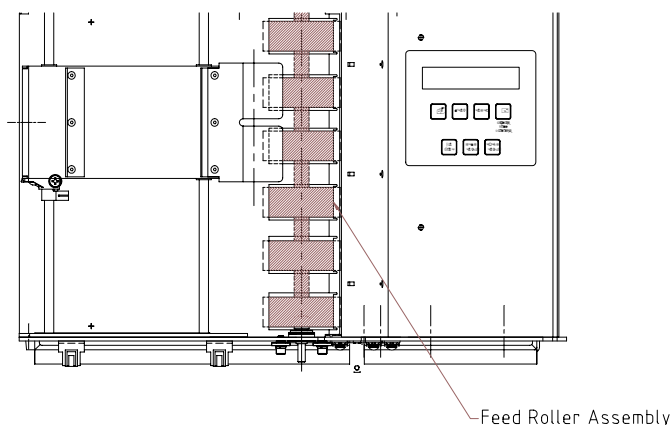
Cleaning the ink jet cartridges

If the print quality is unacceptable select the Purge Print Head function from the Setup Menu (see section 6 - 18). If problems still persist then do the following:

- Remove the Ink Jet Cartridge (See chapter 4). Clean the nozzles with a soft cotton cloth. Use a dry cloth or one moistened with water to clean the ink jet cartridge.
- Remove problem ink jet cartridge and install a new ink jet cartridge.

The Print Head Holder Assembly performs a self cleaning cycle of the Ink Jet Cartridge at the service station before printing and periodically while printing.

Cleaning the Photo Sensor and Bracket Assembly

With use, a film and/or dust will build on the sensors causing misfeeds of media. Lift the front panel and use compressed air to blow dust from the sensors.

Floor Assembly
Lower Sensor
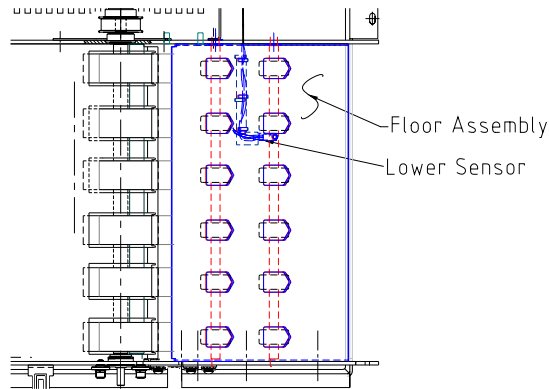
Cleaning the Floor Assembly and Covers

Periodically wipe the outside and floor assembly with a soft damp cotton cloth (WATER ONLY).

Right Hand Exit Roller Slider

Floor Assembly

Left Hand Exit Roller Slider
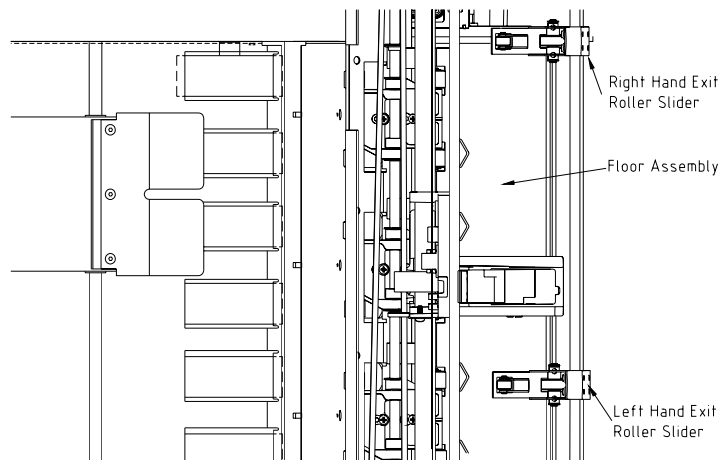
Cleaning the Right and Left Hand Exit Roller Sliders

If the slide rollers were misadjusted, it is possible to get ink transferred from the media onto the roller and slider surface. Use water to dampen a soft cloth to remove the ink from the rollers and slider.

Users Manual Symptoms & Solutions Chart

SYMPTOM	CAUSE	SOLUTION
Nothing happens when power is switched on	No Power to printer.	Check Power Cord. Call Service Representative.
	Fuse is blown	Call Service Representative.
LCD display shows solid line or miscellaneous characters	Problems with miniature Flash Card	Call Service Representative.
	Bad Processor Main Board	Call Service Representative.
Motor on, Feed Roller doesn't turn	Loose set screw on Motor Pulley.	Call Service Representative.
	Mechanical Clutch broken	Call Service Representative.
	Broken belt	Call Service Representative.
Printer is not Feeding Media	Feed Gap not set	Adjust separators ("H" Blocks) to media thickness.
	Media out of specification	Thickness: Minimum .003" (0.0762 mm), maximum 1/4" (6.35 mm)
		No metal clasps (staples, paper clips etc.) on media.
Feed Problems (Intermittent)	Feed Ramp not used.	Adjust the media on the incline plane of the Feed Ramp. Check "H" block gap. Adjust the Wire Form to the correct height and in the center of the media.
	Paper dust present (yellow residue)?	Clean roller with denatured Alcohol. Clean sensors
Feed Problems (Multi feeds)	Separators ("H" blocks) not set correctly	Adjust separators to media thickness
	Sensors dirty	Blow sensors clean with air.
	Brake not properly adjusted	Call Service Representative.

SYMPTOM	CAUSE	SOLUTION
Print Quality Problems (No print)	Ink Jet Cartridge problems	Purge ink jet cartridge.
		Clean cartridge with soft cotton cloth and water.
		Change to a known good cartridge.
	Print Head Holder broken	Call Service Representative.
Non Uniform Print Quality	Print Head Holder broken	Call Service Representative.
Ink Streaking on Media	Print Head Height Adjustment Knob set too low	Turn Knob clockwise to raise the Print Head
	Ink on Exit Slider Rollers	Clean Rollers with water to remove ink.
Ink Print Quality is not sharp	Print Head Height Adjustment Knob set too high	Turn Knob counterclockwise to lower the Print Head
	Media unsuitable	Change to a typical white wove bonded paper
Print is Skewed (Skew Specification +/- 2 1/2 degrees of bottom edge.)	Wire Form set wrong	Set the Wire Form to the center of the media.
	Sliding Fence set wrong	Adjust the fence to within 1/16" (0.16 cm) of the media.
	Exit Slider Rollers set wrong	Adjust exit roller to within 1/4" (6.35 mm) from outside edges of media.
	Wiper Assembly bent or Idler Assembly set wrong	Call Service Representative.
Print Quality Problems (Gray Print)	Ink Jet Cartridge empty	Ink supply too low, Replace Ink Jet Cartridge

SYMPTOM	CAUSE	SOLUTION
Print Quality Problems (Unwanted Bolding)	Main Menu setting of Bold is enabled	Press Test Button. A bold Standard Bryce Office Systems Address is printed. Turn Bold setting off in Main Menu.
	ESC sequence turning bold on, located before the address	Do a HEX Dump of the problem address. Examine for ESC sequence (1B) before the start of the line. Reference printer command codes to find ESC Sequence. Remove the ESC Sequence from the address.
Print Quality Problems (Addresses "walking")	Incorrect address setup	Do Hex Dump and count carriage returns and line feeds of Address Field. Match number of lines to Address Setup.
	Number of lines of address varies. No Form Feed used for address termination.	Check Line Termination CR = CR, LF = LF. Address Termination should be Form Feed
Interface problems (Garbage print)	Incorrect Software Driver	Typical dumb printer interface (TTY, Teletype, DOS text printer, Generic printer) or HP Laserjet series II and W700.
	Wrong Symbol Set selected in printer.	Select correct Symbol Set from printers Setup Menu.
Interface problems (Losing characters & lines)	Bad communications Cable	Replace internal or external cable
	Bad main processor board	Call Service Representative.
	RS232 -C (Serial) over maximum length	Replace serial cable, maximum length 15 feet (457.2 cm)
	Centronic (Parallel) over maximum length	Replace parallel cable, maximum length 10 feet (304.8 cm)
	Incorrect Software Driver	Use the 9K-L or 9K-LC driver with Windows 95. Typical dumb printer interface (TTY, Teletype, DOS text printer, Generic printer) or HP Laserjet series II and W700.

SYMPTOM	CAUSE	SOLUTION
Communication Overrun (Error Message)	Bad communications Cable or CPU I/O	Replace cable or Call Service Representative.
	Computer software XON/XOFF not enabled.	Enable software XON / XOFF.
Framing Error (Error Message)	Incorrect Word Length / Parity / Baud Rate	Turn printer off then back on and send data again. Reset settings for Baud rate in printer or computer.
Parity Error (Error Message)	Incorrect Parity setting	Turn printer off then back on and send data again. Reset Parity rate in printer or computer.
Parallel Interface, printer is not printing (Printer Halted)	Bad data sent	Turn printer off, then turn printer on and send again.
	Bad communications Cable	Replace parallel cable, maximum length 10 feet (304.8 cm)
	Bad main processor board	Call Service Representative.
	Centronic (Parallel) Cable over maximum length	Replace parallel cable, maximum length 10 feet (304.8 cm)
	Incorrect Software Driver	Use the 9K-L or 9K-LC driver with Windows 95. Typical dumb printer interface (TTY, Teletype, DOS text printer, Generic printer) or HP Laserjet series II and W700.

SYMPTOM	CAUSE	SOLUTION
Serial Interface, printer is not printing	Bad data sent	Turn printer off, then turn printer on and send again.
	Bad communications Cable	Replace serial cable, maximum length 15 feet (457.2 cm)
	Bad main processor board	Call Service Representative.
	RS232 -C (Serial) over maximum length	Replace serial cable, maximum length 15 feet (457.2 cm)
	Incorrect Software Driver	Use the 9K-L or 9K-LC driver with Windows 95. Typical dumb printer interface (TTY, Teletype, DOS text printer, Generic printer) or HP Laserjet series II and W700.
Optional Fonts not functioning	Font Cartridge not installed correctly	Verify the Font Cartridge label is facing the operator. Verify the Font Cartridge is inserted all the way into the Font Cartridge Slot.
Address Too High (Error Message)	Software Margin incorrect	Top Line of the Address is above the edge of the media. Move the location of the address down.
Address Too Low (Error Message)	Software Margin incorrect	The Address is below the Bottom edge of the media. The bottom edge margin must be increased.
Shuttle Jam (Error Message)	Shuttle is hitting media	Adjust Print Head Height Adjustment knob clockwise, so head height is above the media.
	Lower Print Head Shaft dirty.	Clean shaft with alcohol and soft cotton cloth.
	Print Head Holder bushings clogged with paper dust	Call Service Representative.
Out of Memory (Error Message)	Overuse of graphics / page information	Turn printer off then send again.
Font Card Removed (Error Message)	Connection to font card incomplete.	Insert Font Card, turn printer off, then turn printer on and send again.

SYMPTOM	CAUSE	SOLUTION
Battery Error (Error Message)	Battery is low and cannot maintain the printers settings when powered down.	Call Service Representative.
No Barcode	Address margin below 5/8" (1.6 cm) minimum distance	Lower Right Barcode, the distance between the last line of the address field and the bottom edge of the media must be at least 5/8 inches (1.6 cm).
	Invalid Zip Code or more data following Zip Code.	Check Zip Code and correct, remove any data following the Zip Code.
	Five (5) Digit Zip Code turned off.	The 5 digit zip code option in the print Main Menu is Off.
Barcode (lower right) is wandering (up and down)	Belt tension is not adjusted correctly.	Call Service Representative.

Notes: _____
_____
_____

Appendix A • Bryce Office Systems 13K **MAIN MENU** Flow Chart

----**MAIN MENU**---- 1. Address Layout					
Address Layout **A. Distance to Right**	DIST TO RIGHT +MORE *4.50 inches -LESS	DIST TO RIGHT +MORE *100 mm -LESS			
Address Layout **B Distance to Bottom**	DIST TO BOTTOM +MORE *2.00 inches -LESS	DIST TO BOTTOM +MORE *50 mm -LESS			
Address Layout **C. Line Spacing**	LINE SPACING 3 lines/inch	LINE SPACING 4 lines/inch	LINE SPACING 6 lines/inch	LINE SPACING 8 lines/inch	LINE SPACING *Automatic
Address Layout **D Orientation**	ORIENTATION *Normal	ORIENTATION Invert			
Address Layout **E Orientation Cntrl.**	ORIENTATION CONTROL *AUTOMATIC	ORIENTATION CONTROL MANUAL			

① Substituted Address Layout menu selections when ORIENTATION is in **Invert**.

①Address Layout A. Distance to Left	LEFT MARGIN +MORE *4.50 inches -LESS	LEFT MARGIN +MORE *100 mm -LESS
①Address Layout B Distance to Top	TOP MARGIN +MORE *2.00 inches -LESS	TOP MARGIN +MORE *50 mm -LESS

----**MAIN MENU**---- 2. Print Quality		
Print Quality *Executive	Print Quality Letter	Print Quality Draft

----**MAIN MENU**---- 3. Font					
FONT ②**A. Name**	③FONT NAME *Courier	FONT NAME Sans Serif	FONT NAME Roman	FONT NAME Baxter	FONT NAME Dingbat
	FONT NAME Hancock	FONT NAME Marina	FONT NAME Quincy	FONT NAME Silicon	FONT NAME Springer
	FONT NAME Stencil	FONT NAME Windmill			
FONT **B. Size**	FONT SIZE +LARGER *12 point -SMALLER				
FONT **C. Width**	FONT WIDTH *Normal (100%)	FONT WIDTH Thin (75%)	FONT WIDTH Condensed (50%)	FONT WIDTH Wide (125%)	FONT WIDTH Expanded (150%)
FONT **D. Bold**	BOLD FONT *Off	BOLD FONT On			
FONT **E. Italic**	ITALIC FONT *Off	ITALIC FONT On			
FONT **F. Outline**	OUTLINE FONT *Off	OUTLINE FONT On			

----**MAIN MENU**---- 4. Barcode				
BARCODE **A. Location**	BARCODE LOCATION *Off	BARCODE LOCATION Above Address	BARCODE LOCATION Below Address	BARCODE LOCATION Lower Right Corner
BARCODE **B. 5 Digit On/Off**	5 DIGIT BARCODE *Off	5 DIGIT BARCODE On		

② To print a list of accessible fonts in their typeface, press the Test button when in the **FONT** menu and the selection **A. Name** is displayed.

③ To print a fonts' character table, press the Test button when in the **FONT NAME** sub-menu and the name of the desired font is displayed.

Appendix A • Bryce Office Systems 13K **MAIN MENU** Flow Chart

----**MAIN MENU**----	ADDRESS RECOVERY	02: John P. Jones	NONE TO RECOVER.
5. Address Recovery	**A. Get Address**	Hit ENTER to Recover	
	ADDRESS RECOVERY	Clear the +YES	
	B. Clear Memory	Address Buffer? -NO	

----**MAIN MENU**----	Clear address +YES	Address counter
6. Clear Counter	(pcs) counter? -NO	cleared. Pieces=0

----**MAIN MENU**----	JOB SETTINGS	Load Setting +MORE	Printer is set for
7. Job Settings	**A. Load**	from Job #3? -LESS	Job #3.
	JOB SETTINGS	Save Settings +MORE	Job #6 has been
	B. Save	as Job #6? -LESS	saved.

Appendix A • Bryce Office Systems 13K **SETUP MENU** Flow Chart

----SETUP MENU---- 1. Heavy Media Mode	HEAVY MEDIA MODE *Off	HEAVY MEDIA MODE On

----SETUP MENU---- 2. Test Print Head	Print a test +YES pattern? -NO	Please wait. Test pattern is printing.

----SETUP MENU---- 3. Purge Print Head	Purge Print +YES Head? -NO	Please wait. Print head being purged.

----SETUP MENU---- 4. Lines Per Address	LINES/ADDRESS +MORE *06 -LESS

----SETUP MENU---- 5. Communications	SERIAL **A. Baud Rate**	BAUD RATE 1200 Baud	BAUD RATE 2400 Baud	BAUD RATE 4800 Baud	BAUD RATE *9600 Baud	BAUD RATE 19200 Baud
	SERIAL **B. Parity**	PARITY *None	PARITY Even	PARITY Odd		
	SERIAL **C. Word Length**	WORD LENGTH 7 Data Bits	WORD LENGTH *8 Data Bits			
	SERIAL **D. Line Termination**	LINE TERMINATION *CR=CR, LF=LF	LINE TERMINATION CR=CR+LF LF=LF	LINE TERMINATION CR=CR LF=CR,LF	LINE TERMINATION CR=CR+LF LF=CR+LF	

----SETUP MENU---- 6. Hex Dump Mode	HEX DUMP MODE *Off	HEX DUMP MODE On

----SETUP MENU---- 7. Language	LANGUAGE **A. Symbol Set**	ISO CHARACTER SET *ISO 6 ANSI ASCII	ISO CHARACTER SET ISO 69 FRENCH	ISO CHARACTER SET ISO 21 GERMAN	ISO CHARACTER SET ISO 4 UK	ISO CHARACTER SET ISO 60 NORW / DAN	ISO CHARACTER SET ISO 11 SWED / FIN
		ISO CHARACTER SET ISO 15 ITALIAN	ISO CHARACTER SET ISO 17 SPANISH	ISO CHARACTER SET ISO 61 NOR / DAN	ISO CHARACTER SET ISO 10 SWED / FIN	ISO CHARACTER SET ISO 16 PORTUGUESE	ISO CHARACTER SET ISO 8859
		ISO CHARACTER SET ROMAN 8	ISO CHARACTER SET WINDOWS LATIN 1	ISO CHARACTER SET PC 8			
	LANGUAGE **B. Inch/Millimeter**	MEASUREMENT UNITS *Inch	MEASUREMENT UNITS Millimeter				
	LANGUAGE **C. Menu Language**	DISPLAY LANGUAGE *English	DISPLAY LANGUAGE German	DISPLAY LANGUAGE French	DISPLAY LANGUAGE Italian	DISPLAY LANGUAGE Spanish	DISPLAY LANGUAGE Dutch
		DISPLAY LANGUAGE Polish					

----SETUP MENU---- 8. Env. Feed Delay	FEED DELAY +MORE * 0.0 SEC. -LESS

----SETUP MENU---- 9. Env. Auto Eject	AUTO EJECT MODE *On	AUTO EJECT MODE Off

----SETUP MENU---- 10. Rom Revision #	ROM REV. = P72693 MAINT COUNT=12345678

④ To print a list of the Main Menu and Setup Menu settings, press the Test button when **ROM REV** is displayed.

HEX CHART

MSB

DECIMAL		0	16	32	48	64	80	96	112
	HEX	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
0	**0**	NUL	DLE	SP	0	@	P	`	p
1	**1**	SOH	DC1	!	1	A	Q	a	q
2	**2**	STX	DC2	"	2	B	R	b	r
3	**3**	ETX	DC3	#	3	C	S	c	s
4	**4**	EOT	DC4	$	4	D	T	d	t
LSB 5	**5**	ENQ	NAK	%	5	E	U	e	u
6	**6**	ACK	SYN	&	6	F	V	f	v
7	**7**	BEL	ETB	'	7	G	W	g	w
8	**8**	BS	CAN	(	8	H	X	h	x
9	**9**	HT	EM	)	9	I	Y	i	y
10	**A**	LF	SUB	*	:	J	Z	j	z
11	**B**	VT	ESC	+	;	K	[	k	{
12	**C**	FF	FS	,	<	L	\	l		
13	**D**	CR	GS	-	=	M	]	m	}
14	**E**	SO	RS	.	>	N	^	n	~
15	**F**	SI	US	/	?	O	_	o	DEL

HEX CHART

Example: The capital letter A is a HEX 41. Find the letter A on the above chart, and look towards the top of the chart (MSB) and the locate the HEX number 4. Then look to the left side of the chart (LSB) and locate the Hex number 1. Therefore the HEX number is MSB 4 and LSB 1= 41.

Introduction

The 13K Address Printer emulates the listed PCL 5 printer command codes. The 13K Address Printer will virtually handle media as an HP1200 would using these printer commands. Additional printer commands have been added to allow control of special printer addressing functions and addressing needs.

The printer command codes are sets of characters that allow your computer software to override the address printer menu selections as fonts, print quality, etc. so customized address formats can be created.

PCL Command Codes

Code Name	Symbol	HEX Value	DEC Value	Description
Line Feed	<LF>	0A	10	Causes the printer to advance the paper one line at current line spacing.
Form Feed	<FF>	0C	12	Causes the printer to advance the paper to the next top of form.
Carriage Return	<CR>	0D	13	Causes the printer to move the current print position to the left margin. Does not cause a paper advance.
Escape	<←>	1B	27	Indicates to the printer that the characters immediately following are part of a printer command.
Space	<SP>	20	32	Causes the printer to move the current print position one character to the right.

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
Initialization				
Reset	←E	1B 45	027 069	Defines reset conditions
Hard Reset	←H	1B 48	027 072	Performs reset plus clears all permanent macros, fonts, and address recovery buffer
Page Control				
Page Size Default	←&l0A	1B 26 6C 30 41	027 038 108 048 065	#10 Envelope values
Page Size Executive	←&l1A	1B 26 6C 31 41	027 038 108 049 065	7.25 x 10.5 inches (18.3 x 26.7 cm)
Page Size Letter	←&l2A	1B 26 6C 32 41	027 038 108 050 065	8.5 x 11 inches (21.6 x 27.9 cm)
Page Size Legal	←&l3A	1B 26 6C 33 41	027 038 108 051 065	8.5 x 14 inches (21.6 x 35.6)
Page Size A4	←&l26A	1B 26 6C 32 36 41	027 038 108 050 054 065	210 x 297 mm
Page Size Mon Env	←&l80A	1B 26 6C 38 30 41	027 038 108 056 048 065	7.5 x 3.88 inches (19.1 x 9.9 cm)
Page Size #10 Env	←&l81A	1B 26 6C 38 31 41	027 038 108 056 049 065	9.5 x 4.1 inches (24.1 x 10.4 cm)
Page Size DL Env	←&l90A	1B 26 6C 39 30 41	027 038 108 057 048 065	220 x 110 mm
Page Size C5 Env	←&l91A	1B 26 6C 39 31 41	027 038 108 057 049 065	229 x 162 mm
Page Size B5 Env	←&l100A	1B 26 6C 31 30 30 41	027 038 108 049 048 048 065	238 x 104 mm
Page Size 9.4" x 15"	←&l101A	1B 26 6C 31 30 31 41	027 038 108 049 048 049 065	9.4 x 15 inches (23.9 x 38.1 cm)
Left Margin	←&a#L	1B 26 61 #..# 4C	027 038 097 #..# 076	# of Columns. Defined by current HMI.
Clear Horiz Margins	←9	1B 39	027 057	
Top Margin	←&l#E	1B 26 6C #..# 45	027 038 108 #..# 069	# of Dots from origin
Page Length ①	←&l#P	1B 26 6C #..# 50	027 038 108 #..# 080	# of Lines
Text Length	←&l#F	1B 26 6C #..# 46	027 038 108 #..# 070	# of Lines
Horiz Motion Index (HMI)	←&k#H	1B 26 6B #..# 48	027 038 107 #..# 072	# of 1/120 inch (1/47 cm)

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
Page Control				
Vertical Motion Index (VMI)	←&l#C	1B 26 6C #..# 43	027 038 108 #..# 067	# of 1/48 inch (1/19 cm)
Line Spacing	←&l#D	1B 26 6C #..# 44	027 038 108 #..# 068	# of lines per inch
Page Eject	←&l0H	1B 26 6C 30 48	027 038 108 048 072	
Heavy Media Mode OFF	←&l6H	1B 26 6C 36 48	027 038 108 054 072	Effects feed mode selection
Heavy Media Mode ON	←&l9H	1B 26 6C 39 48	027 038 108 057 072	Effects feed mode selection
Page Orientation	←&l0O	1B 26 6C 30 4F	027 038 108 048 079	Portrait
	←&l2O	1B 26 6C 32 4F	027 038 108 050 079	Reverse Portrait
Dry Hold Time	←&b#T	1B 26 62 #..# 54	027 038 098 #..# 084	Minimum time between pieces in 1/10 seconds. Specifies time from leading edge to leading edge. Dflt = 0. Max. = 300
Page Height	←+s#H	1B 2B 73 #..# 48	027 043 115 #..# 072	# = height in PCL units. (1/300 in.) (1/118 cm) Range of values is 1050 ... 4500 (3 to 15 in.) (7.62 to 38.1 cm).
Page Width ①	←+s#W	1B 2B 73 #..# 57	027 043 115 #..# 087	# = width in PCL units (1/300 in.) (1/118 cm) Range of values is 1500 .. 2820 (5 to 9.4 in.) (12.7 to 23.9 cm).
Cursor Positioning				
Horizontal Position	←&a#C	1B 26 61 #..# 43	027 038 097 #..# 067	Move to Column no.
	←*p#X	1B 2A 70 #..# 58	027 042 112 #..# 088	# of Dots
	←&a#H	1B 26 61 #..# 48	027 038 097 #..# 072	# of Decipoints (1/720 inch) (1/283 cm)
Vertical Position	←&a#R	1B 26 61 #..# 52	027 038 097 #..# 082	Move to Row no.
	←*p#Y	1B 2A 70 #..# 59	027 042 112 #..# 089	# of Dots
	←&a#V	1B 26 61 #..# 56	027 038 097 #..# 086	# of Decipoints (1/720 inch) (1/283 cm)

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
Half Line Feed	←=	1B 3D	027 061	Half of current VMI

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
<u>Cursor Positioning</u>				
Line Termination	←&k#G			
	0	1B 26 6B 30 47	027 038 107 048 071	CR=CR, LF=LF, FF=FF
	1	1B 26 6B 31 47	027 038 107 049 071	CR=CR+LF, LF=LF, FF=FF
	2	1B 26 6B 32 47	027 038 107 050 071	CR=CR, LF=CR+LF, FF=CR+FF
	3	1B 26 6B 33 47	027 038 107 051 071	CR=CR+LF, LF=CR+LF, FF=CR+FF
<u>Font Selection (Primary)</u>				
Symbol Set	←(ID	1B 28 # .. #	027 040 # .. #	
	←(0D	1B 28 30 44	027 040 048 068	ISO 60 Norwegian ver 1
	←(0I	1B 28 30 49	027 040 048 073	ISO 15 Italian
	←(0N	1B 28 30 4E	027 040 048 078	ISO 8859
	←(0S	1B 28 30 53	027 040 048 083	ISO 11 Swedish
	←(0U	1B 28 30 55	027 040 048 085	ANSI ASCII
	←(1D	1B 28 31 44	027 040 049 068	ISO 61 Norwegian ver 2
	←(1E	1B 28 31 45	027 040 049 069	ISO 4 UK
	←(1F	1B 28 31 46	027 040 049 070	ISO 69 French
	←(1G	1B 28 31 47	027 040 049 071	ISO 21 German
	←(2S	1B 28 32 53	027 040 050 083	ISO 17 Spanish
	←(3S	1B 28 33 53	027 040 051 083	ISO 10 Swedish
	←(4S	1B 28 34 53	027 040 052 083	ISO 16 Portuguese
	←(8U	1B 28 38 55	027 040 056 085	Roman 8
	←(10U	1B 28 31 30 55	027 040 049 048 085	PC - 8
	←(12U	1B 28 31 32 55	027 040 049 050 085	PC 850
	←(19U	1B 28 31 39 55	027 040 049 057 085	Windows 3.1 Latin
Print Quality	←(s#Q			
	←(s0Q	1B 28 73 30 51	027 040 115 048 081	Quality = Draft
	←(s1Q	1B 28 73 31 51	027 040 115 049 081	Quality = Letter
	←(s2Q	1B 28 73 32 51	027 040 115 050 081	Quality = Executive
Spacing ⑥	←(s#P			
	0	1B 28 73 30 50	027 040 115 048 080	Fixed Spacing
	1	1B 28 73 31 50	027 040 115 049 080	Proportional Spacing
Height	←(s#V	1B 28 73 #..# 56	027 040 115 #..# 086	Point Size #/72 inch (1/28 cm)

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
Font Selection (Primary)				
Style	←(s#S			
	0	1B 28 73 30 53	027 040 115 048 083	Upright
	1	1B 28 73 31 53	027 040 115 049 083	Italic
	2	1B 28 73 32 53	027 040 115 050 083	Expanded (150%)
	3	1B 28 73 33 53	027 040 115 051 083	Italic, Expanded (150%)
	4	1B 28 73 34 53	027 040 115 052 083	Thin (75%)
	5	1B 28 73 35 53	027 040 115 053 083	Italic, Thin (75%)
	8	1B 28 73 38 53	027 040 115 056 083	Condensed (50%)
	9	1B 28 73 39 53	027 040 115 057 083	Italic, Condensed (50%)
	16	1B 28 73 31 36 53	027 040 115 049 054 083	Wide (125%)
	17	1B 28 73 31 37 53	027 040 115 049 055 083	Italic, Wide (125%)
	32	1B 28 73 33 32 53	027 040 115 051 050 083	Hollow
	33	1B 28 73 33 33 53	027 040 115 051 051 083	Hollow, Italic
	34	1B 28 73 33 34 53	027 040 115 051 052 083	Hollow, Expanded (150%)
	35	1B 28 73 33 35 53	027 040 115 051 053 083	Hollow, Italic, Expanded (150%)
	36	1B 28 73 33 36 53	027 040 115 051 054 083	Hollow, Thin (75%)
	37	1B 28 73 33 37 53	027 040 115 051 055 083	Hollow, Italic, Thin (75%)
	40	1B 28 73 34 30 53	027 040 115 052 048 083	Hollow, Condensed (50%)
	41	1B 28 73 34 31 53	027 040 115 052 049 083	Hollow, Italic, Condensed (50%)
	48	1B 28 73 34 38 53	027 040 115 052 056 083	Hollow, Wide (125%)
	49	1B 28 73 34 39 53	027 040 115 052 057 083	Hollow, Italic, Wide (125%)
Stroke Weight	←(s#B			
	0	1B 28 73 30 42	027 040 115 048 066	Normal

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
	3	1B 28 73 33 42	027 040 115 051 066	Bold

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
Font Selection (Primary)				
Typeface	←(s#T			
	3	1B 28 73 33 54	027 040 115 051 084	Courier
	4	1B 28 73 34 54	027 040 115 052 084	San Serif
	5	1B 28 73 35 54	027 040 115 053 084	Roman
	61440	1B 28 73 36 31 34 34 30 54	027 040 115 054 049 052 052 048 084	External (First)
	61441	1B 28 73 36 31 34 34 31 54	027 040 115 054 049 052 052 049 084	External (Second) If available
Font Selection				
Font Selection	←(#X	1B 28 #..# 58	027 040 #..# 088	Font ID # from download
Font Selection (Secondary)				
Symbol Set	←)ID	1B 29 # .. #	027 041 # .. #	
	←)0D	1B 29 30 44	027 041 048 068	ISO 60 Norwegian ver 1
	←)0I	1B 29 30 49	027 041 048 073	ISO 15 Italian
	←)0N	1B 29 30 4E	027 041 048 078	ISO 8859
	←)0S	1B 29 30 53	027 041 048 083	ISO 11 Swedish
	←)0U	1B 29 30 55	027 041 048 085	ANSI ASCII
	←)1D	1B 29 31 44	027 041 049 068	ISO 61 Norwegian ver 2
	←)1E	1B 29 31 45	027 041 049 069	ISO 4 UK
	←)1F	1B 29 31 46	027 041 049 070	ISO 69 French
	←)1G	1B 29 31 47	027 041 049 071	ISO 21 German
	←)2S	1B 29 32 53	027 041 050 083	ISO 17 Spanish
	←)3S	1B 29 33 53	027 041 051 083	ISO 10 Swedish
	←)4S	1B 29 34 53	027 041 052 083	ISO 16 Portuguese
	←)8U	1B 29 38 55	027 041 056 085	Roman 8
	←)10U	1B 29 31 30 55	027 041 049 048 085	PC - 8
	←)12U	1B 29 31 32 55	027 041 049 050 085	PC 850
	←)19U	1B 29 31 39 55	027 041 049 057 085	Windows 3.1 Latin
Print Quality	←)s#Q			
	←)s0Q	1B 29 73 30 51	027 041 115 048 081	Quality = Draft
	←)s1Q	1B 29 73 31 51	027 041 115 049 081	Quality = Letter
	←)s2Q	1B 29 73 32 51	027 041 115 050 081	Quality = Executive
Spacing ⑥	←)s#P			
	0	1B 29 73 30 50	027 041 115 048 080	Fixed Spacing

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
	1	1B 29 73 31 50	027 041 115 049 080	Proportional Spacing
Font Selection (Secondary)				
Height	←)s#V	1B 29 73 #..# 56	027 041 115 #..# 086	Point Size #/72 inch (1/28 cm)
Style	←)s#S			
	0	1B 29 73 30 53	027 041 115 048 083	Upright
	1	1B 29 73 31 53	027 041 115 049 083	Italic
	2	1B 29 73 32 53	027 041 115 050 083	Expanded (150%)
	3	1B 29 73 33 53	027 041 115 051 083	Italic, Expanded (150%)
	4	1B 29 73 34 53	027 041 115 052 083	Thin (75%)
	5	1B 29 73 35 53	027 041 115 053 083	Italic, Thin (75%)
	8	1B 29 73 38 53	027 041 115 056 083	Condensed (50%)
	9	1B 29 73 39 53	027 041 115 057 083	Italic, Condensed (50%)
	16	1B 29 73 31 36 53	027 041 115 049 054 083	Wide (125%)
	17	1B 29 73 31 37 53	027 041 115 049 055 083	Italic, Wide (125%)
	32	1B 29 73 33 32 53	027 041 115 051 050 083	Hollow
	33	1B 29 73 33 33 53	027 041 115 051 051 083	Hollow, Italic
	34	1B 29 73 33 34 53	027 041 115 051 052 083	Hollow, Expanded (150%)
	35	1B 29 73 33 35 53	027 041 115 051 053 083	Hollow, Italic, Expanded (150%)
	36	1B 29 73 33 36 53	027 041 115 051 054 083	Hollow, Thin (75%)
	37	1B 29 73 33 37 53	027 041 115 051 055 083	Hollow, Italic, Thin (75%)
	40	1B 29 73 34 30 53	027 041 115 052 048 083	Hollow, Condensed (50%)
	41	1B 29 73 34 31 53	027 041 115 052 049 083	Hollow, Italic, Condensed (50%)
	48	1B 29 73 34 38 53	027 041 115 052 056 083	Hollow, Wide (125%)
	49	1B 29 73 34 39 53	027 041 115 052 057 083	Hollow, Italic, Wide (125%)
Stroke Weight	←)s#B			

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
	0	1B 29 73 30 42	027 041 115 048 066	Normal
	3	1B 29 73 33 42	027 041 115 051 066	Bold

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
Font Selection (Secondary)				
Typeface	←)s#T			
	3	1B 29 73 33 54	027 041 115 051 084	Courier
	4	1B 29 73 34 54	027 041 115 052 084	San Serif
	5	1B 29 73 35 54	027 041 115 053 084	Roman
	61440	1B 29 73 36 31 34 34 30 54	027 041 115 054 049 052 052 048 084	External (First)
	61441	1B 29 73 36 31 34 34 31 54	027 041 115 054 049 052 052 049 084	External (Second) If available
Underline				
Underline	←&d#D			
Underline On	0	1B 26 64 30 44	027 038 100 48 068	
Underline On	3	1B 26 64 33 44	027 038 100 51 068	
Underline Off	←&d@	1B 26 64 40	027 038 100 064	
Macros ②				
Macro ID	←&f#Y	1B 26 66 #..# 59	027 038 102 #..# 089	# is macro ID
Macro Control	←&f#X			
	0	1B 26 66 30 58	027 038 102 048 088	Start macro definition (last ID specified)
	1	1B 26 66 31 58	027 038 102 049 088	Stop macro definition
	2	1B 26 66 32 58	027 038 102 050 088	Execute Macro (last ID specified). Use current modified print environment. Changes retained on completion
	3	1B 26 66 33 58	027 038 102 051 088	Call Macro (last ID specified). Use current modified print environment. Restore prior environment on completion.
	4	1B 26 66 34 58	027 038 102 052 088	Enable macro for auto overlay (last ID specified)
	5	1B 26 66 35 58	027 038 102 053 088	Disable auto overlay
	6	1B 26 66 36 58	027 038 102 054 088	Delete all Macros
	7	1B 26 66 37 58	027 038 102 055 088	Delete all temp macros

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
	8	1B 26 66 38 58	027 038 102 056 088	Delete Macro (last ID specified)
	9	1B 26 66 39 58	027 038 102 057 088	Make macro temp (last ID specified)
	10	1B 26 66 31 30 58	027 038 102 049 048 088	Make macro perm (last ID specified)
Programming				
Hex Dump Mode ON	←Y	1B 59	027 089	Data printed as hex numbers, ESC and Control codes not executed.
Hex Dump Mode OFF	←Z	1B 5A	027 090	
Font Management				
Assign Font ID #	←*c#D	1B 2A 63 #..# 44	027 042 099 #..# 068	# is Font ID
Font Control	←*c#F			
	0	1B 2A 63 30 46	027 042 099 048 070	Delete all Fonts
	1	1B 2A 63 31 46	027 042 099 049 070	Delete temp fonts
	2	1B 2A 63 32 46	027 042 099 050 070	Delete last font
	3	1B 2A 63 33 46	027 042 099 051 070	Delete Character
	4	1B 2A 63 34 46	027 042 099 052 070	Make font temp
	5	1B 2A 63 35 46	027 042 099 053 070	Make font permanent
Soft Font Creation ③				
Font Descriptor	←)s#W [data]	1B 29 73 #..# 57 data	027 041 115 #..# 087 data	Laser Jet soft fonts are supported. These fonts always have a 64 byte descriptor. Desk Jet fonts are not supported.
Character Code	←*c#E	1B 2A 63 #..# 45	027 042 099 #..# 069	ASCII code no.
Download Character	←(s#W [data]	1B 28 73 #..# 57 data	027 040 115 #..# 087 data	
Raster Graphics				
Raster Graphics Compression	←*b#M			
	0	1B 2A 62 30 4D	027 042 098 048 077	Uncompressed format
	2	1B 2A 62 32 4D	027 042 098 050 077	TIFF format rev. 4.0
	3	1B 2A 62 33 4D	027 042 098 051 077	Delta Row compression
	4	1B 2A 62 34 4D	027 042 098 052 077	Reserved

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
<u>Transfer graphics by plane</u>	←*b #V	1B 2A 62 # 56 [data]	027 042 098 # 086 [data]	Transfer a row of Raster Data to printer, # specifies the number of bytes to follow V. The format of the bytes is expected to be in the current compression mode. The number of commands expected is the number of planes in the current palette.
<u>Transfer Raster Graphics data</u>	←*b#W [data]	1B 2A 62 #..# 57 [data]	027 042 098 #..# 087 [data]	Transfer a Row of Taster Data to printer, # specifies the number of bytes to follow W. The format of the bytes is expected to be in the current compression mode. Move the cursor one raster line after printing the raster data. Use command to send the last plane of raster data.
<u>Raster Y Offset</u>	←*b #Y [data]	1B 2A 62 #..# 59 [data]	027 042 098 #..# 089 [data]	Move vertically from current postion by the specified number of dots
<u>Start Raster Graphics</u>	←*r#A			
	0	1B 2A 72 30 41	027 042 114 048 065	Place to left most position
	1	1B 2A 72 31 41	027 042 114 049 065	Place at current position
<u>End Raster Graphics</u>				
	←*rB	1B 2A 72 42	027 042 114 066	
	←*rC	1B 2A 72 43	027 042 114 067	Resets left margin to 0
<u>Set Raster Graphics Width</u>	←*r#S	1B 2A 72 #..# 53	027 042 114 #..# 083	Set number of pixels
<u>Set Raster Graphics Height</u>	←*r#T	1B 2A 72 # 54	027 042 114 # 084	Height is raster rows
Simple Color	←*r#U			Default = 1.
Black pallet	1	1B 2A 72 31 55	027 042 114 049 085	1 plane

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
Raster Graphics Resolution	←*t#R			
	75	1B 2A 72 37 35 52	027 042 116 055 055 082	75 dots per inch
	150	1B 2A 72 31 35 30 52	027 042 116 049 053 048 082	150 dots per inch
	300	1B 2A 72 33 30 30 52	027 042 116 051 048 048 082	300 dots per inch

① The Page Width & Page Length printer commands function like the Page Size command. Using these commands automatically enables Page Eject and disables overlay macros. Both the Page Width and Page Length commands can be used independently and will only change the width or length to the maximum allowable page size of 9.4 x 15 inches (23.9 x 38.1 cm). Setting the cursor positioning commands, margin settings, print data, etc. to cause printing beyond the pages size dimensions will be cropped.

② Only one overlay macro can be used at a time, and cannot be recursive. The overlay macros need print quality, page parameters, etc. to determine the printers' page setup.

③ Soft font creation is in HP non compressed Bit Map Font Format.

⑥ The resident fonts are scaleable from 8 to 30 points. If a desired font spacing does not match the font selected an internal font will be substituted. For fixed spacing the substitute font will be Courier, and Sans Serif for proportionally spaced fonts. Characteristics of the font being replaced, such as point size, print width, etc., will be matched by the substituted font.

To determine page size or cusor movement in Dots multiply by 300 Dots /inch (2.54 cm) for Horizontal and 300 Dots /inch (2.54 cm) for Vertical. Example: a Letter size page of 8.5 x 11 inches (21.6 x 27.9 cm) is 2550 x 3300 Dots

PCL parameterized escape sequences

To utilize the 13K address printers internal bar-coding features, records are searched for a valid ZIP, ZIP + 4, Delivery Point Bar Code (DPBC) or DPBC with a check sum. For ZIP + 4 or a 11 digit DPBC, a checksum is computed for printing a USPS Postnet bar-code with framing bars. The position of the Postnet bar-code is determined by the printers menu setup or the bar-code location commands in effect. Bar-codes will not be printed outside of the printers' Page Size setup.

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
Bar Code				
Non - address data markers ④	←+b#A			Marks data that is not part of destination address.
	1	1B 2B 62 31 41	027 043 098 49 065	marks the end of non-address data
	2	1B 2B 62 32 41	027 043 098 50 065	marks the beginning of the non-address data.
5 Digit Bar Codes	←+b#D			
	0	1B 2B 62 30 44	027 043 098 048 068	Don't print 5 Digit Bar Codes
	1	1B 2B 62 31 44	027 043 098 049 068	Print all Bar Codes for zip, zip + 4, and DPBC.
Bar Code	←+b#E			
	0	1B 2B 62 30 45	027 043 098 048 069	Disable Bar Code
	1	1B 2B 62 31 45	027 043 098 049 069	Enable Bar Code
Bar Code - Horizontal	←+b#H	1B 2B 62 #..# 48	027 043 098 #..# 072	# of Decipoints (1/720 inch) (1/283 cm)
Bar Code Placement	←+b#P	1B 2B 62 #..# 50	027 043 098 #..# 080	Distance in 1/10 inch (1/4 cm) units from right edge of media. Value of 0 indicates edge of media
	0	1B 2B 62 30 50	027 043 098 048 080	Bar Code in lower right (default position)
	1	1B 2B 62 31 50	027 043 098 049 080	Bar Code above address
	2	1B 2B 62 32 50	027 043 098 050 080	Bar Code below address
⑦	3	1B 2B 62 33 50	027 043 098 051 080	Print Bar Code at specified horizontal & vertical position, otherwise print Bar Code in default position

PCL parameterized escape sequences

Printer Feature	Printer Command	HEX Equivalent	DEC Equivalent	Description
Bar Code				
Bar Code - Vertical	←+b#V	1B 2B 62 #..# 56	027 043 098 #..# 086	VMI # in Decipoints (1/720 inch) from bottom of page to bottom of bar-code
ZIP Code command Bar Code -⑤	←+b#Znnn	1B 2B 62 #..# 5A nnn	027 043 098 #..# 090 nnn	#= number of characters in the ZIP Code string. n = the ASCII representation of the ZIP code string.
	←+b5Z nnnnn	1B 2B 62 35 5A nnnnn	027 043 098 053 090 nnnnn	n = the ASCII representation of the ZIP code string. Must contain 5 digits.
	←+b9Z nnnnnnnnn	1B 2B 62 39 5A nnnnnnnnn	027 043 098 057 090 nnnnnnnnn	n = the ASCII representation of the ZIP code string. Must contain 9 digits.
	←+b11Z nnnnnnnnnnn	1B 2B 62 31 31 5A nnnnnnnnnnn	027 043 098 49 49 090 nnnnnnnnnnn	n = the ASCII representation of the ZIP code string. Must contain 11 digits.
	←+b12Z nnnnnnnnnnnn	1B 2B 62 31 32 5A nnnnnnnnnnnn	027 043 098 049 050 090 nnnnnnnnnnnn	n = the ASCII representation of the ZIP code string. Must contain 12 digits.

④ Use a pair of escape sequences, the first one before the data that is not part of the destination address such as return addresses, graphics, messages, etc. and the other to mark the end.

⑤ Use Zip Code command when two ZIP codes are being sent. The first ZIP code will be printed without a bar-code. The second ZIP code in the Zip Code command string will print a corresponding bar-code but not print the ZIP code. The Zip Code command only overrides the bar-code command for the present address.

⑦   Use the ←+b#H and ←+b#V commands to position the bar code. Measure the position from the right-hand corner of the leading edge of the media, not the upper left-hand corner.

13K CHARACTER SET

(Modeled after PC 850 Character Table)

0-15	16-31	32-47	48-63	64-79	80-95	96-111	112-127	128-143	144-159	160-175	176-191	192-207	208-223	224-239	240-255
(0)	(16)	\<SP\> (32)	0 (48)	@ (64)	P (80)	` (96)	p (112)	Ç (128)	É (144)	á (160)	░ (176)	└ (192)	ð (208)	Ó (224)	- (240)
(1)	(17)	! (33)	1 (49)	A (65)	Q (81)	a (97)	q (113)	ü (129)	æ (145)	í (161)	▒ (177)	┴ (193)	Ð (209)	ß (225)	± (241)
(2)	(18)	" (34)	2 (50)	B (66)	R (82)	b (98)	r (114)	é (130)	Æ (146)	ó (162)	▓ (178)	┬ (194)	Ê (210)	Ô (226)	(242)
(3)	(19)	# (35)	3 (51)	C (67)	S (83)	c (99)	s (115)	â (131)	ô (147)	ú (163)	│ (179)	├ (195)	Ë (211)	Ò (227)	(243)
(4)	(20)	$ (36)	4 (52)	D (68)	T (84)	d (100)	t (116)	ä (132)	ö (148)	ñ (164)	┤ (180)	─ (196)	È (212)	õ (228)	¶ (244)
(5)	(21)	% (37)	5 (53)	E (69)	U (85)	e (101)	u (117)	à (133)	ò (149)	Ñ (165)	Á (181)	┼ (197)	(213)	Õ (229)	§ (245)
(6)	(22)	& (38)	6 (54)	F (70)	V (86)	f (102)	v (118)	å (134)	û (150)	ª (166)	Â (182)	ã (198)	Í (214)	µ (230)	(246)
(7)	(23)	' (39)	7 (55)	G (71)	W (87)	g (103)	w (119)	ç (135)	ù (151)	º (167)	À (183)	Ã (199)	Î (215)	Þ (231)	¸ (247)
(8)	(24)	((40)	8 (56)	H (72)	X (88)	h (104)	x (120)	ê (136)	ÿ (152)	¿ (168)	© (184)	╚ (200)	Ï (216)	þ (232)	° (248)
(9)	(25)	) (41)	9 (57)	I (73)	Y (89)	i (105)	y (121)	ë (137)	Ö (153)	® (169)	╣ (185)	╔ (201)	┘ (217)	Ú (233)	¨ (249)
\<LF\> (10)	(26)	* (42)	: (58)	J (74)	Z (90)	j (106)	z (122)	è (138)	Ü (154)	¬ (170)	║ (186)	╩ (202)	┌ (218)	Û (234)	· (250)
(11)	\<ESC\> (27)	+ (43)	; (59)	K (75)	[(91)	k (107)	{ (123)	ï (139)	ø (155)	½ (171)	╗ (187)	╦ (203)	█ (219)	Ù (235)	(251)
\<FF\> (12)	(28)	, (44)	\< (60)	L (76)	\\ (92)	l (108)	| (124)	î (140)	£ (156)	¬ (172)	╝ (188)	╠ (204)	▄ (220)	(236)	(252)
\<CR\> (13)	(29)	- (45)	= (61)	M (77)	] (93)	m (109)	} (125)	ì (141)	Ø (157)	¡ (173)	¢ (189)	= (205)	(221)	(237)	(253)
(14)	(30)	. (46)	\> (62)	N (78)	^ (94)	n (110)	~ (126)	Ä (142)	(158)	« (174)	¥ (190)	╬ (206)	Ì (222)	¯ (238)	(254)
(15)	(31)	/ (47)	? (63)	O (79)	_ (95)	o (111)	(127)	Å (143)	ƒ (159)	» (175)	┐ (191)	¤ (207)	▀ (223)	´ (239)	™ (255)

International Character Substitution

The following industry standard character substitution techniques are utilized:

ISO #	Character Set Name	ID #	35	36	64	91	92	93	94	96	123	124	125	126
6	ANSI ASCII	0U	#	$	@	[	\\	]	^	`	{	|	}	~
69	French	1F	£	$	à	°	ç	§	^	µ	é	ù	è	¨
21	German	1G	#	$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß
4	United Kingdom	1E	£	$	@	[	\\	]	^	`	{	|	}	‾
60	Norwegian/Danish	0D	#	$	@	Æ	Ø	Å	^	`	æ	ø	å	‾
11	Swedish/Finnish	0S	#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
15	Italian	0I	£	$	§	°	ç	é	^	ù	à	ò	è	ì
17	Spanish	2S	£	$	§	¡	Ñ	¿	^	`	°	ñ	ç	~
61	Norwegian/Danish	1D	§	$	@	Æ	Ø	Å	^	`	æ	ø	å	|
16	Portuguese	4S	#	$	§	Ã	Ç	Õ	^	`	ã	ç	õ	°
10	Swedish	3S	#	¤	@	Ä	Ö	Å	^	`	ä	ö	å	‾

13K CHARACTER SET
(Modeled after 8859 Latin Character Table)

0	16	`<SP>` 32	0 48	@ 64	P 80	` 96	p 112	128	144	160	° 176	À 192	Ð 208	à 224	ð 240
1	17	! 33	1 49	A 65	Q 81	a 97	q 113	129	145	¡ 161	± 177	Á 193	Ñ 209	á 225	ñ 241
2	18	" 34	2 50	B 66	R 82	b 98	r 114	130	146	¢ 162	178	Â 194	Ò 210	â 226	ò 242
3	19	# 35	3 51	C 67	S 83	c 99	s 115	131	147	£ 163	179	Ã 195	Ó 211	ã 227	ó 243
4	20	$ 36	4 52	D 68	T 84	d 100	t 116	132	148	¤ 164	´ 180	Ä 196	Ô 212	ä 228	ô 244
5	21	% 37	5 53	E 69	U 85	e 101	u 117	133	149	¥ 165	µ 181	Å 197	Õ 213	å 229	õ 245
6	22	& 38	6 54	F 70	V 86	f 102	v 118	134	150	¦ 166	¶ 182	Æ 198	Ö 214	æ 230	ö 246
7	23	' 39	7 55	G 71	W 87	g 103	w 119	135	151	§ 167	· 183	Ç 199	215	ç 231	247
8	24	(40	8 56	H 72	X 88	h 104	x 120	136	152	¨ 168	¸ 184	È 200	Ø 216	è 232	ø 248
9	25	) 41	9 57	I 73	Y 89	i 105	y 121	137	153	© 169	185	É 201	Ù 217	é 233	ù 249
`<LF>` 10	26	* 42	: 58	J 74	Z 90	j 106	z 122	138	154	ª 170	186	Ê 202	Ú 218	ê 234	ú 250
11	`<ESC>` **27**	+ 43	; 59	K 75	[91	k 107	{ 123	139	155	« 171	» 187	Ë 203	Û 219	ë 235	û 251
`<FF>` 12	28	, 44	< 60	L 76	\ 92	l 108	| 124	140	156	172	188	Ì 204	Ü 220	ì 236	ü 252
`<CR>` 13	29	- 45	= 61	M 77	] 93	m 109	} 125	141	157	173	½ 189	Í 205	221	í 237	253
14	30	. 46	> 62	N 78	^ 94	n 110	~ 126	142	158	® 174	190	Î 206	Þ 222	î 238	þ 254
15	31	/ 47	? 63	O 79	_ 95	o 111	127	143	159	¯ 175	¿ 191	Ï 207	ß 223	ï 239	ÿ 255

The ID# for the ISO 8859 Character Set is (0N).

13K CHARACTER SET
(Modeled after Roman -8 Character Table)

0	16	<SP> 32	0 48	@ 64	P 80	` 96	p 112	128	144	160	‾ 176	â 192	Å 208	Á 224	þ 240
1	17	! 33	1 49	A 65	Q 81	a 97	q 113	129	145	À 161	177	ê 193	î 209	Ã 225	Þ 241
2	18	" 34	2 50	B 66	R 82	b 98	r 114	130	146	Â 162	178	ô 194	Ø 210	ã 226	· 242
3	19	# 35	3 51	C 67	S 83	c 99	s 115	131	147	È 163	° 179	û 195	Æ 211	Ð 227	µ 243
4	20	$ 36	4 52	D 68	T 84	d 100	t 116	132	148	Ê 164	Ç 180	á 196	å 212	ð 228	¶ 244
5	21	% 37	5 53	E 69	U 85	e 101	u 117	133	149	Ë 165	ç 181	é 197	í 213	Í 229	245
6	22	& 38	6 54	F 70	V 86	f 102	v 118	134	150	Î 166	Ñ 182	ó 198	ø 214	Ì 230	– 246
7	23	' 39	7 55	G 71	W 87	g 103	w 119	135	151	Ï 167	ñ 183	ú 199	æ 215	Ó 231	247
8	24	(40	8 56	H 72	X 88	h 104	x 120	136	152	´ 168	¡ 184	à 200	Ä 216	Ò 232	½ 248
9	25	) 41	9 57	I 73	Y 89	i 105	y 121	137	153	169	¿ 185	è 201	ì 217	Õ 233	ª 249
<LF> 10	26	* 42	: 58	J 74	Z 90	j 106	z 122	138	154	^ 170	¤ 186	ò 202	Ö 218	õ 234	º 250
11	<ESC> 27	+ 43	; 59	K 75	[91	k 107	{ 123	139	155	¨ 171	£ 187	ù 203	Ü 219	Š 235	« 251
<FF> 12	28	, 44	< 60	L 76	\ 92	l 108		124	140	156	172	¥ 188	ä 204	É 220	š 236	252
<CR> 13	29	- 45	= 61	M 77	] 93	m 109	} 125	141	157	Ù 173	§ 189	ë 205	ï 221	Ú 237	» 253
14	30	. 46	> 62	N 78	^ 94	n 110	~ 126	142	158	Û 174	ƒ 190	ö 206	ß 222	Ÿ 238	± 254
15	31	/ 47	? 63	O 79	_ 95	o 111	127	143	159	£ 175	¢ 191	ü 207	Ô 223	ÿ 239	255

The ID# for the Roman 8 Character Set is (8U).

13K CHARACTER SET
(Modeled after Windows 3.1 Latin Character Table)

0	16	<SP> 32	0 48	@ 64	P 80	` 96	p 112	128	144	160	° 176	À 192	Ð 208	à 224	ð 240
1	17	! 33	1 49	A 65	Q 81	a 97	q 113	129	145	¡ 161	± 177	Á 193	Ñ 209	á 225	ñ 241
2	18	" 34	2 50	B 66	R 82	b 98	r 114	, 130	146	¢ 162	178	Â 194	Ò 210	â 226	ò 242
3	19	# 35	3 51	C 67	S 83	c 99	s 115	ƒ 131	" 147	£ 163	179	Ã 195	Ó 211	ã 227	ó 243
4	20	$ 36	4 52	D 68	T 84	d 100	t 116	132	" 148	¤ 164	´ 180	Ä 196	Ô 212	ä 228	ô 244
5	21	% 37	5 53	E 69	U 85	e 101	u 117	133	• 149	¥ 165	µ 181	Å 197	Õ 213	å 229	õ 245
6	22	& 38	6 54	F 70	V 86	f 102	v 118	134	– 150	¦ 166	¶ 182	Æ 198	Ö 214	æ 230	ö 246
7	23	' 39	7 55	G 71	W 87	g 103	w 119	135	— 151	§ 167	· 183	Ç 199	215	ç 231	247
8	24	(40	8 56	H 72	X 88	h 104	x 120	^ 136	152	¨ 168	¸ 184	È 200	Ø 216	è 232	ø 248
9	25	) 41	9 57	I 73	Y 89	i 105	y 121	137	™ 153	© 169	185	É 201	Ù 217	é 233	ù 249
<LF> 10	26	* 42	: 58	J 74	Z 90	j 106	z 122	Š 138	š 154	ª 170	186	Ê 202	Ú 218	ê 234	ú 250
11	<ESC> 27	+ 43	; 59	K 75	[91	k 107	{ 123	139	155	« 171	» 187	Ë 203	Û 219	ë 235	û 251
<FF> 12	28	, 44	< 60	L 76	\ 92	l 108	| 124	140	156	172	188	Ì 204	Ü 220	ì 236	ü 252
<CR> 13	29	- 45	= 61	M 77	] 93	m 109	} 125	141	157	- 173	½ 189	Í 205	221	í 237	253
14	30	. 46	> 62	N 78	^ 94	n 110	~ 126	142	158	® 174	190	Î 206	Þ 222	î 238	þ 254
15	31	/ 47	? 63	O 79	_ 95	o 111	127	143	Ÿ 159	¯ 175	¿ 191	Ï 207	ß 223	ï 239	ÿ 255

The ID# for the Windows 3.1 Latin Character Set is (19U).
The Windows 3.1 Latin symbol set is recommended to use when running Microsoft Windows 3.1 / Windows 95.
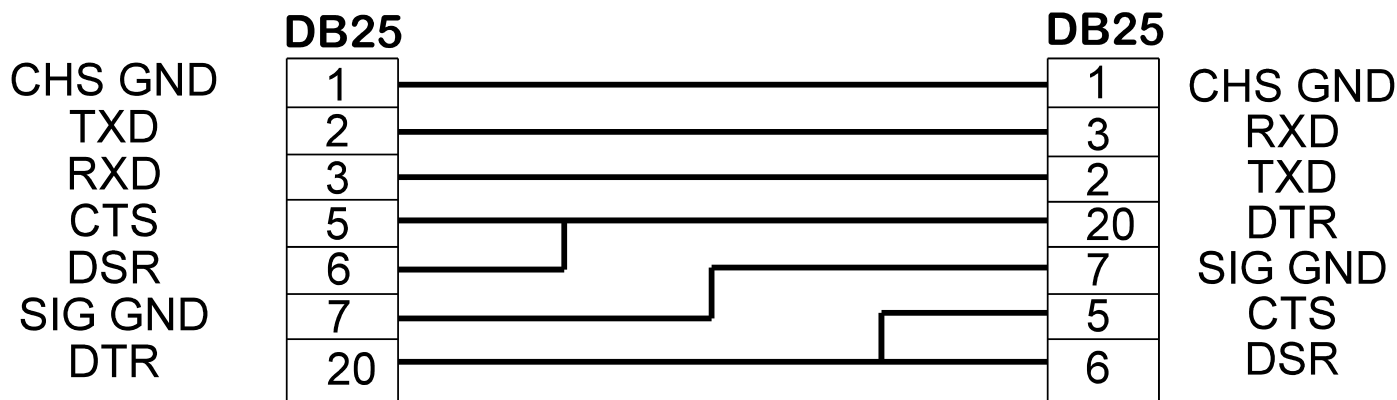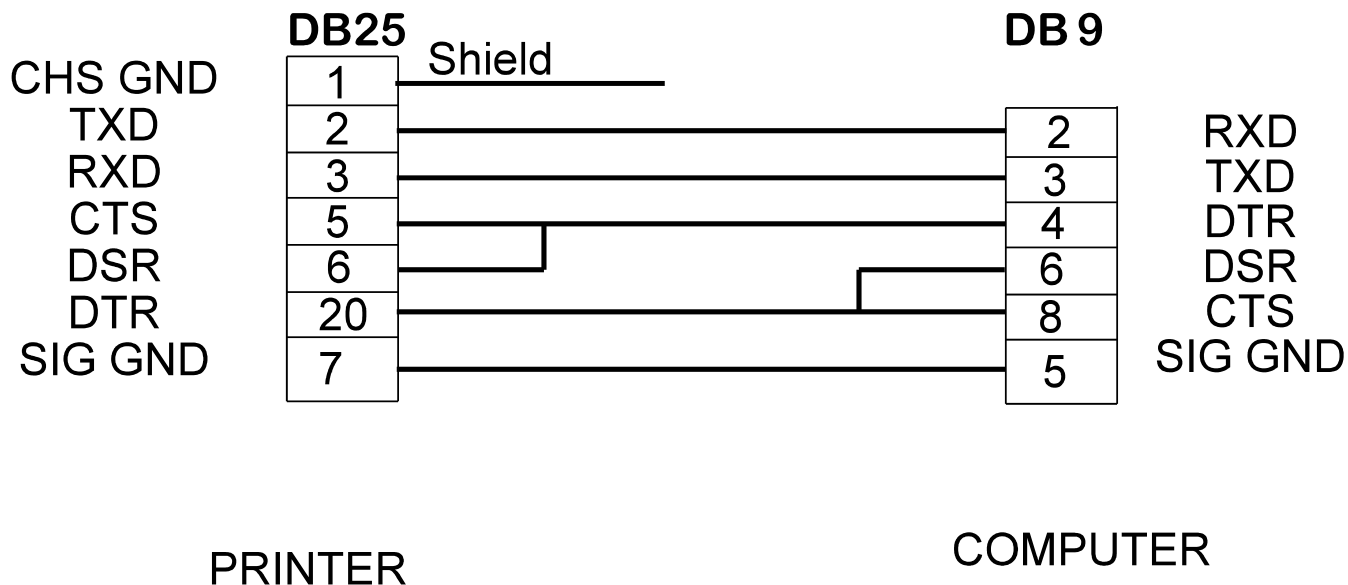
13K CHARACTER SET
(Modeled after PC - 8 Character Table)

0	16	<SP> 32	0 48	@ 64	P 80	` 96	p 112	Ç 128	É 144	á 160	░ 176	└ 192	208	224	240
1	17	! 33	1 49	A 65	Q 81	a 97	q 113	ü 129	æ 145	í 161	▒ 177	┴ 193	209	225	± 241
2	18	" 34	2 50	B 66	R 82	b 98	r 114	é 130	Æ 146	ó 162	▓ 178	┬ 194	210	226	242
3	19	# 35	3 51	C 67	S 83	c 99	s 115	â 131	ô 147	ú 163	│ 179	├ 195	211	227	243
4	20	$ 36	4 52	D 68	T 84	d 100	t 116	ä 132	ö 148	ñ 164	┤ 180	─ 196	212	228	244
5	21	% 37	5 53	E 69	U 85	e 101	u 117	à 133	ò 149	Ñ 165	181	┼ 197	213	229	245
6	22	& 38	6 54	F 70	V 86	f 102	v 118	å 134	û 150	ª 166	182	198	214	µ 230	246
7	23	' 39	7 55	G 71	W 87	g 103	w 119	ç 135	ù 151	° 167	183	199	215	231	247
8	24	(40	8 56	H 72	X 88	h 104	x 120	ê 136	ÿ 152	¿ 168	184	200	216	232	º 248
9	25	) 41	9 57	I 73	Y 89	i 105	y 121	ë 137	Ö 153	169	185	201	217	233	• 249
<LF> 10	26	* 42	: 58	J 74	Z 90	j 106	z 122	è 138	Ü 154	170	186	202	218	234	• 250
11	<ESC> 27	+ 43	; 59	K 75	[91	k 107	{ 123	ï 139	¢ 155	½ 171	187	203	219	235	251
<FF> 12	28	, 44	< 60	L 76	\ 92	l 108	| 124	î 140	£ 156	172	188	204	220	236	252
<CR> 13	29	- 45	= 61	M 77	] 93	m 109	} 125	ì 141	¥ 157	¡ 173	189	205	221	237	253
14	30	. 46	> 62	N 78	^ 94	n 110	~ 126	Ä 142	158	« 174	190	206	222	238	254
15	31	/ 47	? 63	O 79	_ 95	o 111	127	Å 143	ƒ 159	» 175	191	207	223	239	255

The ID# for the PC 8 Character Set is (10U).

Serial Communication (RS - 232 C) connections for the Address Printer

DB25				DB 9	
CHS GND	1	Shield			
TXD	2		2	RXD	
RXD	3		3	TXD	
CTS	5		4	DTR	
DSR	6		6	DSR	
DTR	20		8	CTS	
SIG GND	7		5	SIG GND	

PRINTER   COMPUTER

DB25				DB25	
CHS GND	1		1	CHS GND	
TXD	2		3	RXD	
RXD	3		2	TXD	
CTS	5		20	DTR	
DSR	6		7	SIG GND	
SIG GND	7		5	CTS	
DTR	20		6	DSR	

Software Table of Contents

Software Setup

This section will help in setting up the Address Printer to run programs in Windows 3.1 and DOS. Some assistance is given for use on the Apple and Macintosh. If you are using Windows 95 use the 13K driver installation disk that is included in the accessories kit.

Generic Software Driver Information

Most software packages allow you to select or setup a printer driver. Use one of the following printer drivers.

Dumb Printer

Generic Printer

Typewriter

Plain Vanilla

Teletype

TTYCRLF Printer

TTYCR Printer   (This requires the Setup Menu CR = CR + LF option to be turned on)

If none of these choices are available one of the following may work:

HP Laserjet Series II or any Laserjet II listed (excluding Postscript)

HP Laserjet 4

DOS Text Printer

Don't forget to set the MODE COMMAND!!!

Type the MODE command at the DOS prompt or add the MODE command to the AUTOEXEC.BAT file. The AUTOEXEC.BAT will load the command when the computer is first booted up.

Example:

When printing to the parallel port load MODE LPT1:,,P

When printing to the serial port load MODE COM1:9600,N,8,1,P

(**NOTE:** The printer ports or parameter settings may vary from the preceding MODE command examples. If using DOS version 5.0, a **„B** may be substituted for the **„P)**

## *MICROSOFT WINDOWS™ Applications Software Driver Information*

Microsoft Windows Software Driver Information

When using Microsoft Windows 3.0 or later, select the Generic / Text printer driver.

Microsoft Windows95 Software Driver Information

Changing the Print Driver Properties might have to be made for the printer to work with different software packages in the Windows95 operating environment.

1. Click START ... SETTINGS... PRINTERS

2. Highlight the printer driver being used (usually 9K-L or 9K-LC)

3. Click FILE ... PROPERTIES

4. Click on the DETAILS tab

5. Click on PORT SETTING ... make sure that all of the boxes are checked ...OK

6. Check the GRAPHICS tab when pictures are missing or printed out incorrectly. **Note**: Some software may require clicking on an OPTIONS button to open a dialog box of check boxes options.

7. Click on APPLY once settings are correct.
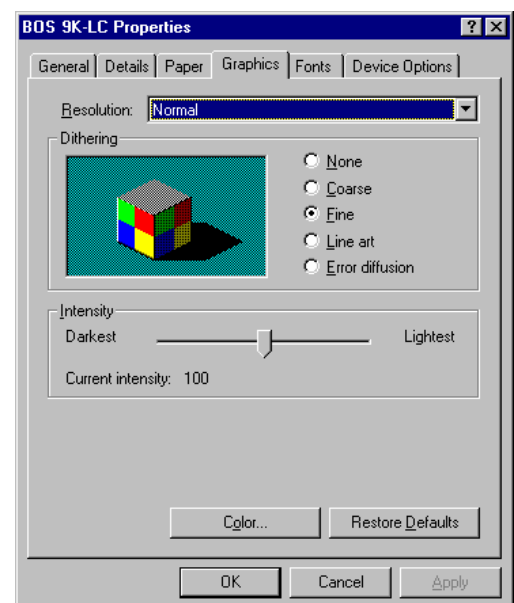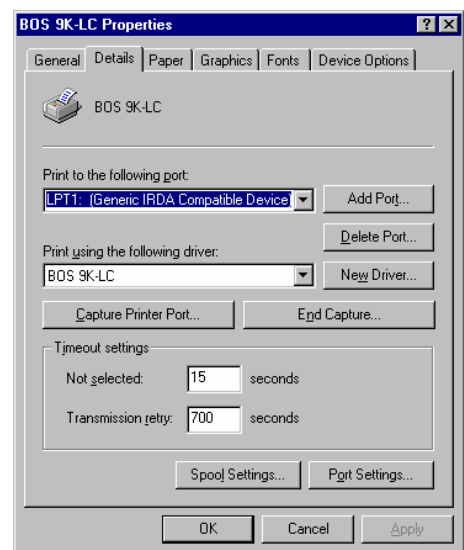
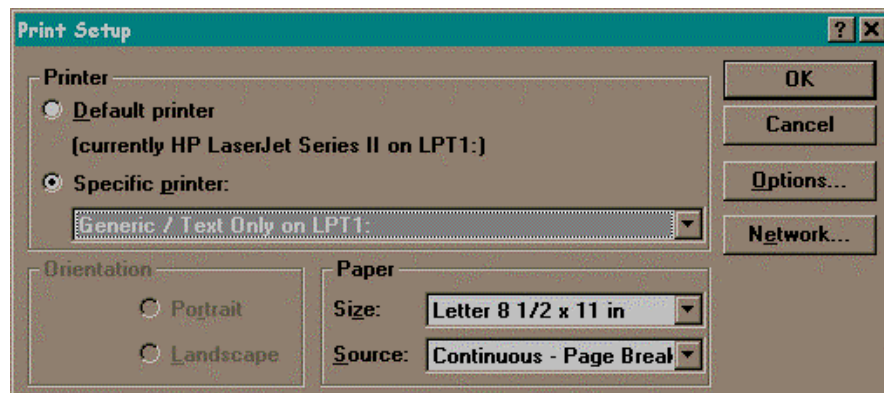Software Interface sample: **AccuZIP 6 for Windows**

Installation:

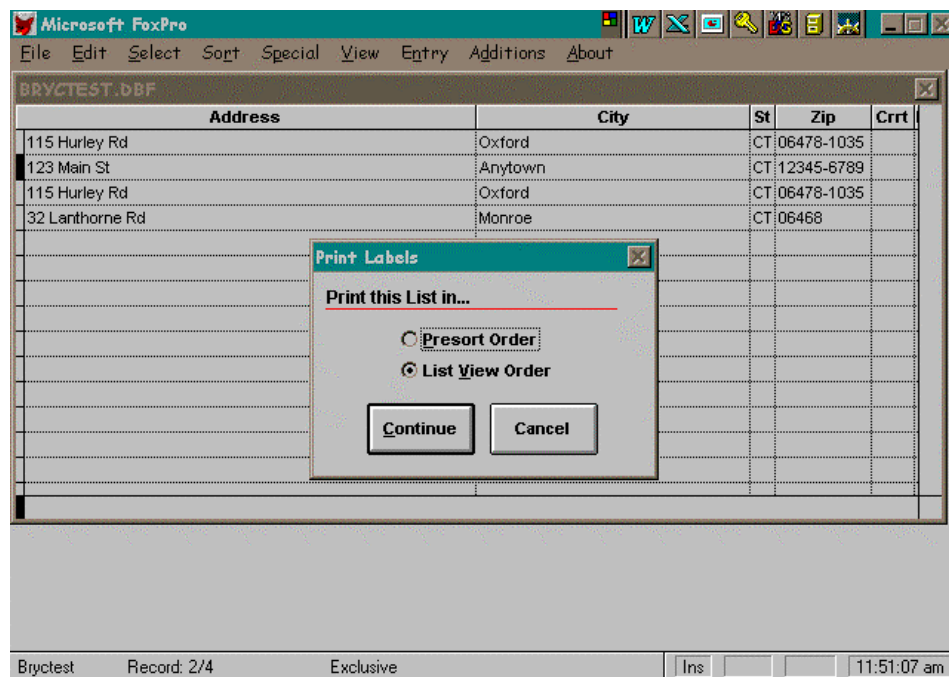Follow the instructions in the User Manual to install Accuzip 6.

Choose **Print Setup** from the File Menu.

The **Print Setup**
   window will be
   displayed.
   Select the
   Generic/Text
   Only printer.
Click on **OK**

Choose **Print** from
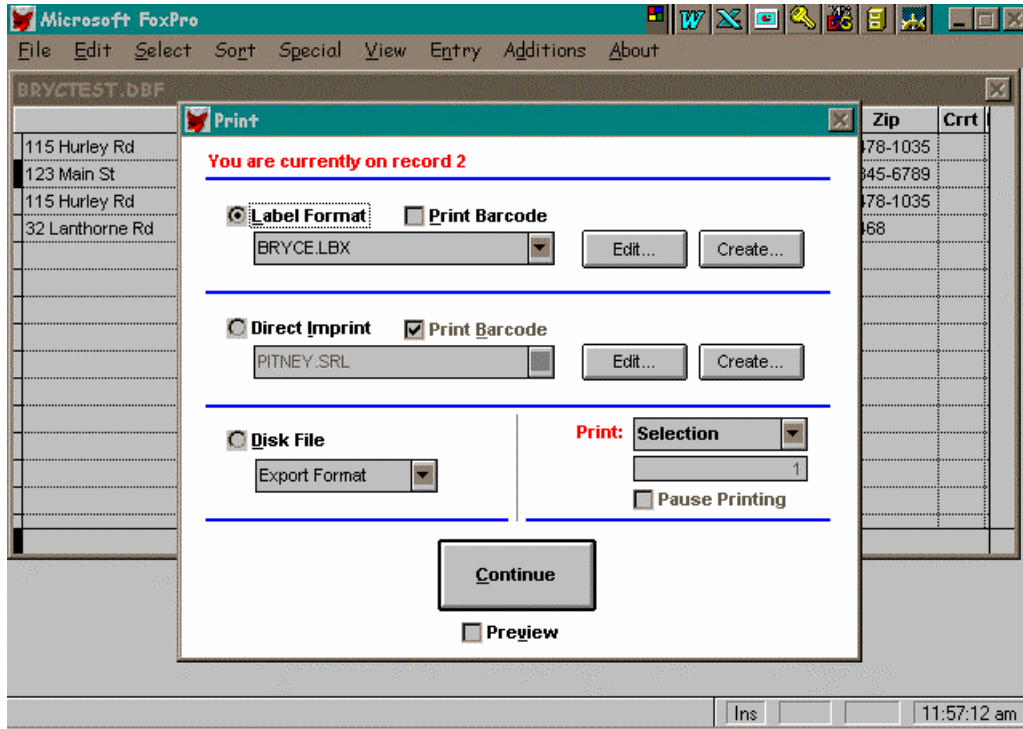the File Menu, then
select **Labels**.

The **Print Labels**
   window will be
   displayed.
Select the desired
option
Click on **Continue**.

The **Print** window will be displayed. Select **Label Format**.
Ensure that there is not a check in the **Print Barcode** box.
Select the BRYCE.LBX label template.

Select **Continue**.

Another **Print** window will be displayed.
Ensure that the Generic/Text Only is the selected printer.
Choose the desired **Print range**.
NOTE:
1. Set the address setup option, in the Bryce setup menu, to 8 lines.
1. Ignore the print quality selection that is displayed in the Print quality section of the Print window. The print quality you desire can be set in the Bryce Main Menu under the **Print Quality** option.
Select **OK** to print to your Bryce Address printer.
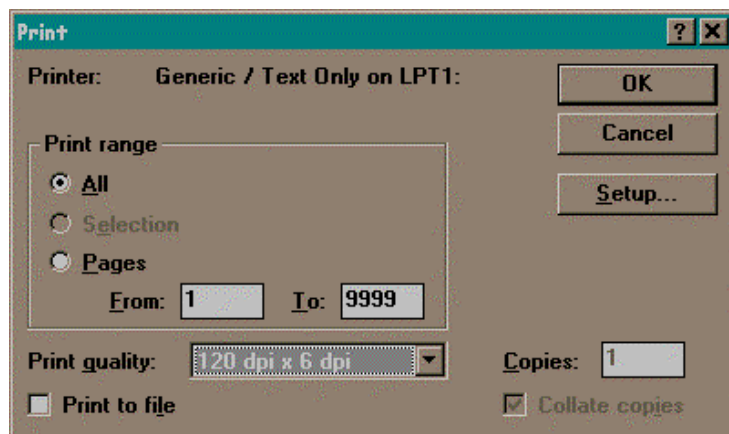
Software Interface sample: **Lotus Approach ver. 3.0 for Windows**
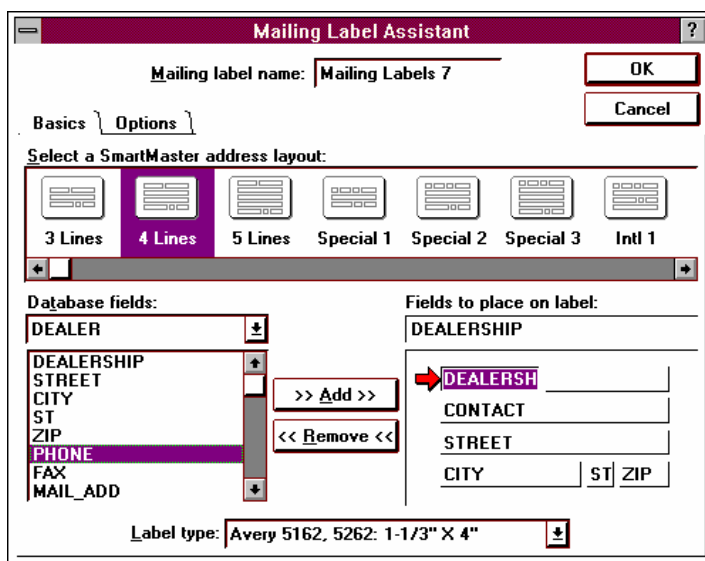
Installation:

Follow the instructions in the User Manual to install Lotus Approach

Open Your Database
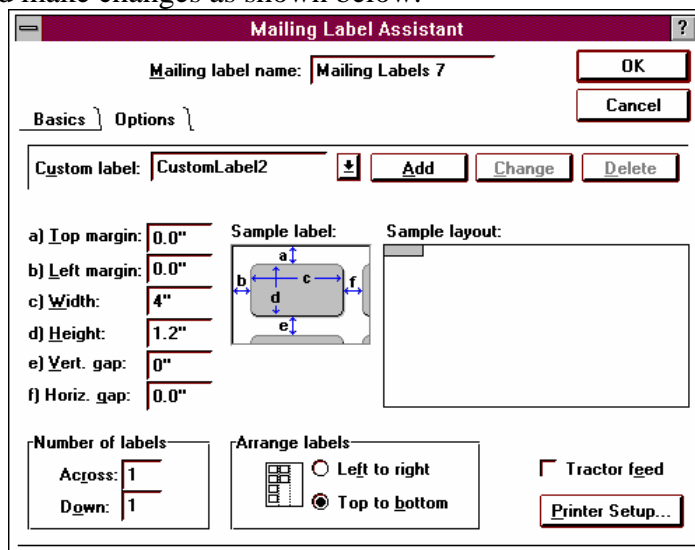
Select **Mailing Label** from the Create Menu, The Mailing Label Assistant window will be displayed,
Select **Avery 5162, 5262: 1 1/3" x 4" as the Label Type** (see below).
Place the required fields, as shown below. Your address structure may differ, this is just an example.

Click on **Options** and make changes as shown below.

continued on next page

Click on **Printer Setup**.

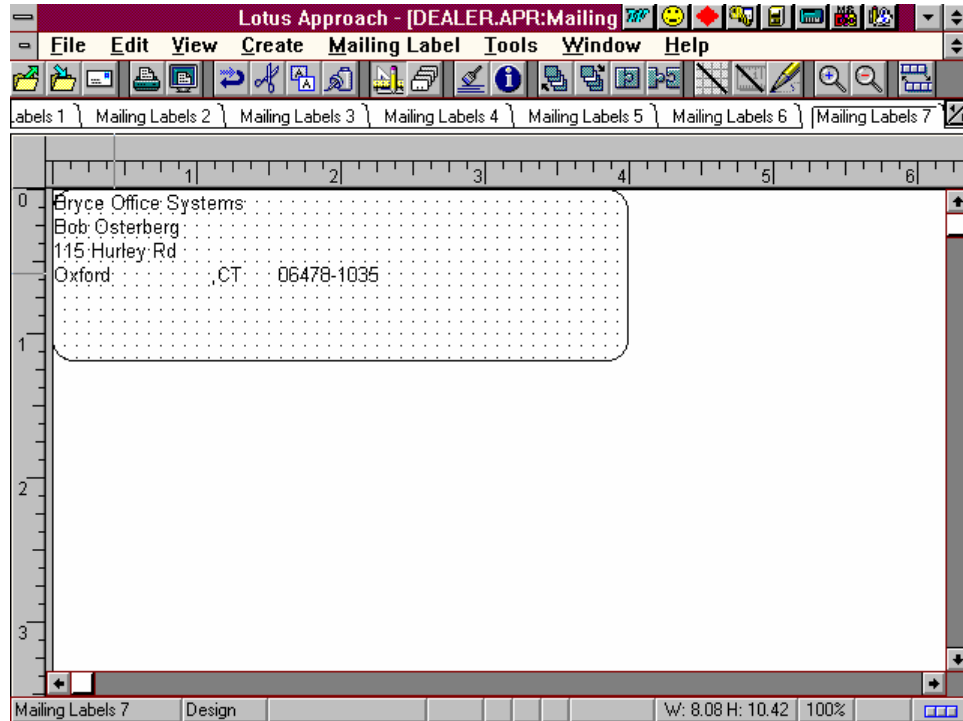Select the **Generic/Text Only** printer driver.
Click on **OK**.
This will return you to the **Mailing Label Assistant** window.
Click on **OK**.

The label that you just created will be displayed.
Select **Design** from the View Menu.
Position your fields as shown below.

Set the Address Setup, located in the Bryce setup Menu, to 8 lines.
You are now ready to print labels on your Bryce printer.

Software interface sample: **ARCLIST ver. 2.06**

The Arclist program must be configured for use by the Bryce BOS 13K in terms of both printer type selection and output type selection.

You must first identify the Bryce BOS 13K printer.
       Run Arclist program called CONFIG.
       Choose PRINTER from menu, then choose CUSTOM from menu, then type Bryce BOS13K as   printer.
When this information is entered, a PORT menu will be displayed.
       Select appropriate port, and characteristics if using a serial port.
NOTE: The BOS 13K must have the same port characteristics as the computer port.
       All special entries (line feed, fonts, etc.) should be left blank.
       Select SAVE from menu, then choose OKAY from menu.
       Select QUIT from menu, then choose SAVE from menu.

Next identify the address format.
       Run ARCLIST.
       Select LABELS from menu, then choose PRINT from menu, use the arrow keys to select a format.
       Select Bryce BOS 13K.
       Enter data according to the table below.

> **Title: Bryce BOS 13K**
> **Label Type: envelope**
> **Pitch: pica**
> **Font: Normal**
> **Line Feed: Normal**
> **Left Margin: 0**
> **Label width in chars: 42**
> **Lines per label: 8**
> **Top Margin: 0**
> **Labels Down: N/A**
> **Lines Between Labels: N/A**
> **Labels Across: N/A**
> **Space Between Labels: N/A**
>
> **Criteria: All**
> **Index: Record**
> **Order: Ascending**
> **Printer: Bryce BOS 10K**

       Select ALL or Nth
       Select INDEX or PRESORT
       Select DEFAULT from Printer Menu
       Select NON-STOP or PAUSE
       Select GO from Printer menu
Print Mailing Labels
NOTE: To pause program while printing, press ESC on Computer Keyboard rather than taking the BOS **13K**
       Off-Line .

Software Interface sample: **Bulk Mailer + 4.20i for Windows**

Installation:

Follow the instructions in the User Manual to install Bulk Mailer.

Select **New** from the File Menu.
Follow the instructions in the Users Manual on how to enter your address information.
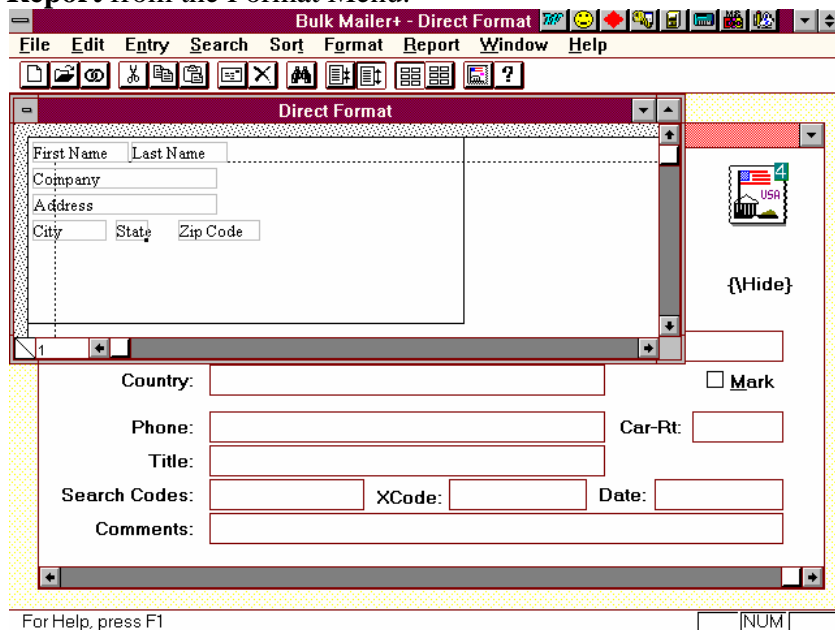When you are ready to print addresses;

Select **Direct Format** from the Report Menu.

Select **Edit Report** from the Format Menu.
Move the fields to the upper left corner of the mail piece, as shown below.
Select **Preview Report** from the Format Menu.
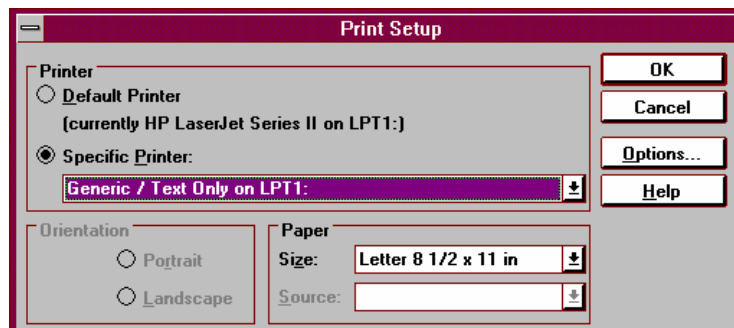

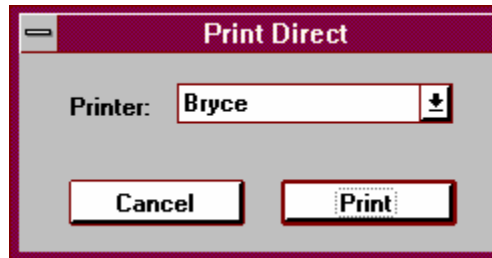Select **Print Setup** from the File Menu.
Select the **Generic / Text Only** printer driver, as shown below.
Click on **OK**.

continued on next page

Select **Print Direct** from the File Menu.
Select the **Bryce printer** from the Print Direct Window (shown below).

Set the ADDRESS SETUP, located in the Bryce printers Setup Menu, to 8 lines.

You are now ready to print.

Software interface sample: **DATAPERFECT ver 2.2**

Refer to the DataPerfect Reference Manual to setup a database for printing labels.

While using DataPerfect, a label must be defined in order to print your addresses on the BOS 13K.

Be sure the cursor is in the panel from which you want to run the report.

Press **Report/Export (Shift-F7)** to access the report list.

With the cursor on Built-In Short Reports, press **Insert** to create a new report.

Select **Edit Report Name (9)**, then enter the desired report name (for example, BOS 13K Label). If you want to send report to the BOS 13K, select **Printer On/Off (1), then type in the appropriate port number.**

Select **Print Margins (7)**, then enter the following data:

Top	**0**
Bottom	**0**
Left	**0**
Text Lines	**7**

Select **Edit Report Form (8).**

Move the cursor to the Report Body section of the report form, then press **Report Options (Ctrl-F7)**.

Select **Labels (5)**.

Enter **1** as the number of labels across the page.

Enter **45** as the width in characters of each label.

Enter **7** as the number of lines per label.

The code for the label specifications is displayed in the Report Body section.

Use **Select (F4)** to select the fields needed for the labels. Be sure that the alphanumeric fields are edited to include the :;T print mode indicator. (See Field Format, Print Mode Indicators in your Reference Manual).

Press **Exit (F7)** or **Save (F10)** to save the report form when you have completed selecting fields. You will return to the Report Menu.

Set the **ADDRESS SETUP** in the BOS 13K SETUP MENU to **7 lines**.
You are now ready to print addresses on your BOS 13K.
Press Report/Export (Shift-F7) to run the report.

Software Interface sample: **dBASE IV ver 1.0**

Upon entering dBASE, the **dBASE Control Panel** will be displayed.
To Create a Label, move cursor to the **labels** column and select **<create>**.
A label will be displayed on the screen.
Press **ALT & D**, to pull down the Dimensions menu, the following settings should be entered;

Width of label   **45**
Height of label   **Set to the number of lines in your address**
Indentation   **0**
Lines between labels   **1**
Space between columns   **1**
Columns of labels   **1**

Press **ESC**
Add fields to label using the instructions at the bottom of the screen.
Once you have completed your layout, press **ALT & L** to pull down the Layout menu and **select;**
        Save this label design.
When this label format is saved, it will be displayed as a file under the labels column in the control panel.
To Print labels;
Activate a data file;
Select the label file you created under the labels column;
Follow menu directions to print.

NOTE: dBase IV does a CR & LF before each address, therefore you must do the following:
        IF SEVEN LINE ADDRESS, DO A FF BEFORE THE START OF THE NAME,
        Example   <CR> <LF>
        CHR(12)+NAME

Software interface sample: **FILE EXPRESS ver. 5.1**

When using **FILE EXPRESS**, A label must be defined in order to print your addresses on the BOS 13K.

Select **Label Printing (6)** from the Main Menu.
Select **Design a New Label** from Label Menu.
Enter Data into the Label Spacing Screen according to the following table:

1	How many labels across the page (1-5)	1
2	Spaces across from label to label (10-500)	n/a
3	Lines down from label to label (1-999)	7
4	Printable lines on each label (1-250)	7
5	Characters per line on each label (10-999)	45
6	Tab position to first label (1-99)	1

When you have completed entering this data, **press F10 to accept these changes.**
A Test Printer Screen will be displayed, if you would like to test this setup press Y, if not press N.

File Express will display a label box on the screen the size that was specified on the Label Spacing Screen.

Type **ALT-F** to pop up field window.
Move highlight bar to the field you would like on the first line of your label.
Press Enter twice, to accept it as a field only.
Repeat the above sequence to place your fields in the appropriate locations.
When you are finished designing your label, **press F10**.

The Record Selection Screen will be displayed. Press **Enter**.

The Label Sub Menu will be displayed.
Select **S** (to select save option).
Press **Enter** (to confirm you want to save).
Type in a name for your label.
Press **Enter.**
Type a description for you label.
Press **Enter (to save your label layout)**

While you are in the Label Sub Menu, now would be a good time to specify a printer.
　　　Press **7** to update printer options.
　　　Press **Enter**
　　　Press **ALT-S** to select a printer definition file.
　　　Select **POSTSCRIPT - Generic.**, and press Enter.

CONTINUED ON NEXT PAGE

FILE EXPRESS ver 5.1 continued

The Printer Option Menu will be displayed, **enter the following data:**

1	**Printer Definition File**	PostScript
2	**Printer Port <1>, <2>, <3>, or <D>efault (LPT1)**	**Enter the appropriate port #**
3	**Line Spacing**	6
4	**Pitch**	**R** for regular
5	**Printer Initialization String**	**D** for Default
6	**Printer Reset String**	**D** for Default

Press **F10**
Select **Record#**
Select **Yes**

Set the Address Setup Menu on the BOS 13K to 7 lines.

You are now ready to print addresses on your BOS 13K printer.

Software interface sample: **IBM FILING ASSISTANT**

Refer to the IBM Filing Assistant manual to setup a database for printing labels. The program uses pre-set printer specifications which are defined.

From the main menu choose **PRINT**

From the print menu choose **PREDEFINED PRINT SPEC**.

Create a new print spec called BRYCE

Set up the format for the output of the address as follows, or alter it to better suit your database. (A proper address format, as per USPS guidelines, is listed in Appendix H). The **X** and the + symbols are an important part of the print specifications.

Name: X
Title: X
Company: X
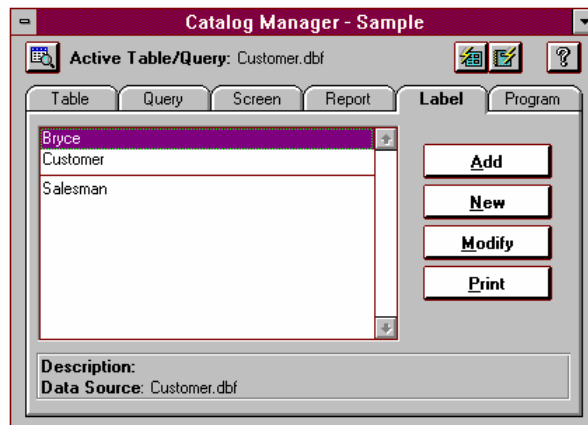Address: X
City: +   State: +   Zip: +

Using the Bryce print spec, the program should now be able to output your address list to the Bryce Machine.

Software Interface sample: **Microsoft FoxPro 2.6 for Windows**

Installation:

Follow the instructions in the User Manual to install Microsoft FoxPro.

Choose **Label** from the Catalog Manager, then click on **New**.

The **Create Label** window will be displayed. Select the table or query you wish to create a label
    for.
Click on **Label Wizard**
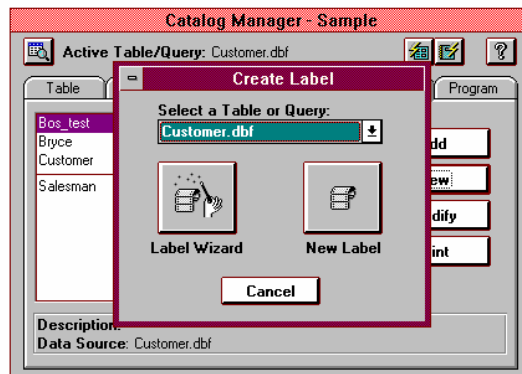
continued on next page

The **Label Wizard - Step 2 of 5** window will be displayed.
Select **Avery #5165 (8½ x 11)**
Click on **Next**.

The **Label Wizard - Step 3 of 5** window will be displayed. Select the fields you wish to include
in your label.
Insert a space between the City and State fields, and also between the State and Zip fields, as
shown below.
When you have done this, Click on **Next**.

The **Label Wizard - Step 4 of 5** window will be displayed. Select the field or fields you wish to sort by.
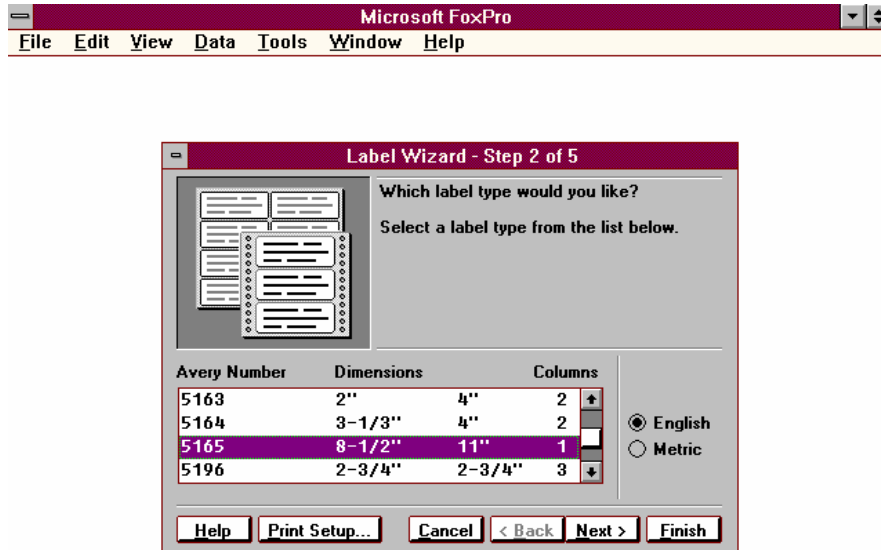
Note: If Descending is selected, the mail pieces will be stacked in ascending order when they exit the Bryce printer.

Click on **Next**.
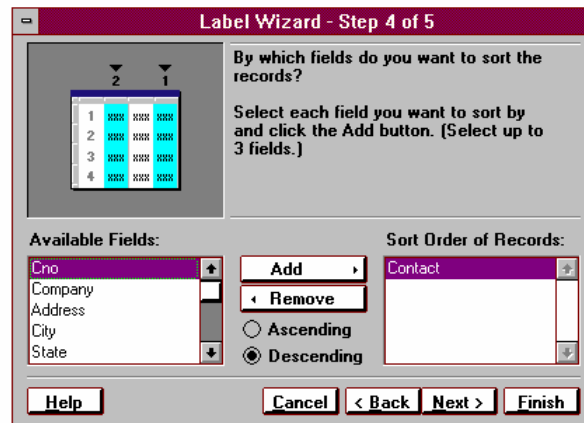
The **Label Wizard - Step 5 of 5** window will be displayed.
Select **Save Label for Later Use**.
Select **Finish**

The **Save As** window will be displayed.
Enter a filename for the label file. In our example, we have selected the filename BOS_TEST.lbx.
Select **OK**.

This will bring you back to the Catalog Manager. Select the file Bos_test.
Click on Modify. (see next page)
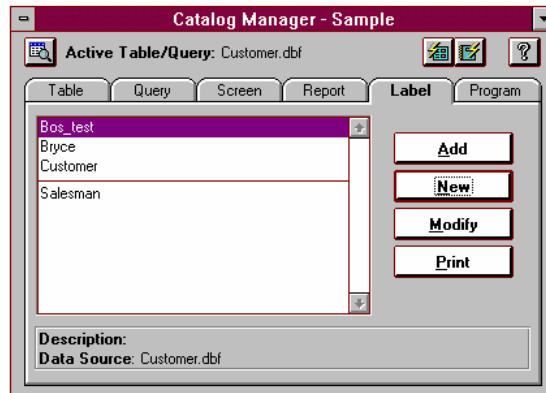
The **Change Label** window will be displayed.
Click on **Label Writer**.
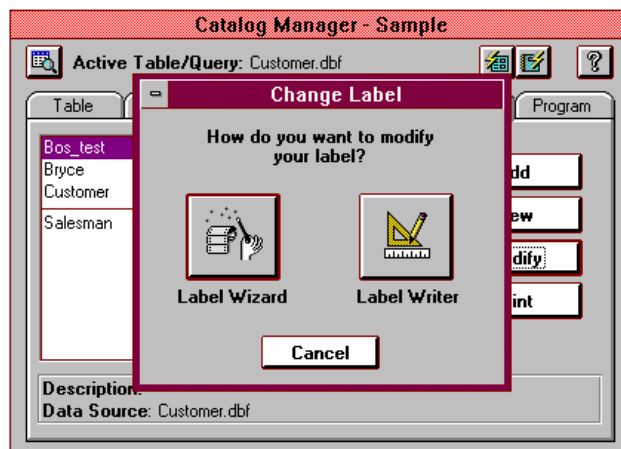
continued on next page

The **Microsoft FoxPro Label Edit** window will be displayed.

No fields will appear on the display, this is because the fields are located towards the bottom of the label.

Click on the side scroll bar until you see the fields.
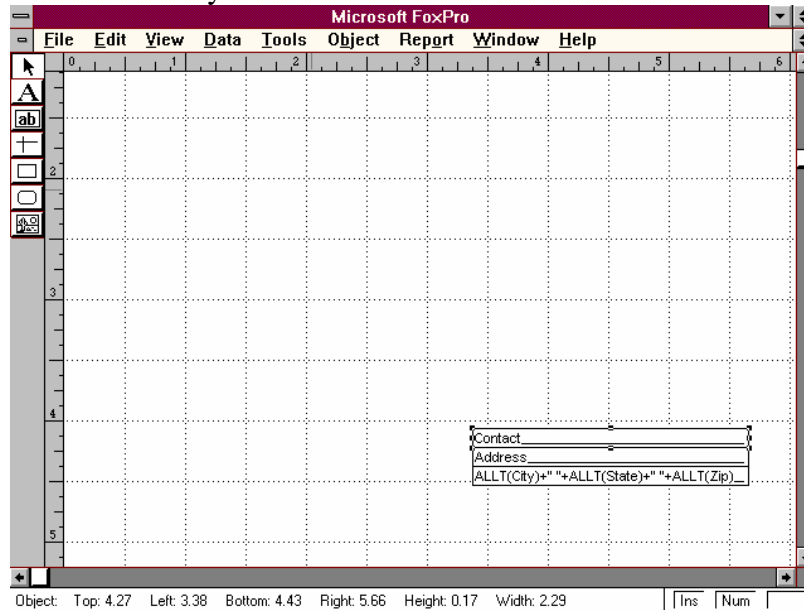
Move the fields to the top left of the label, as shown below.

Make sure that you move the first field to the 0,0 position.
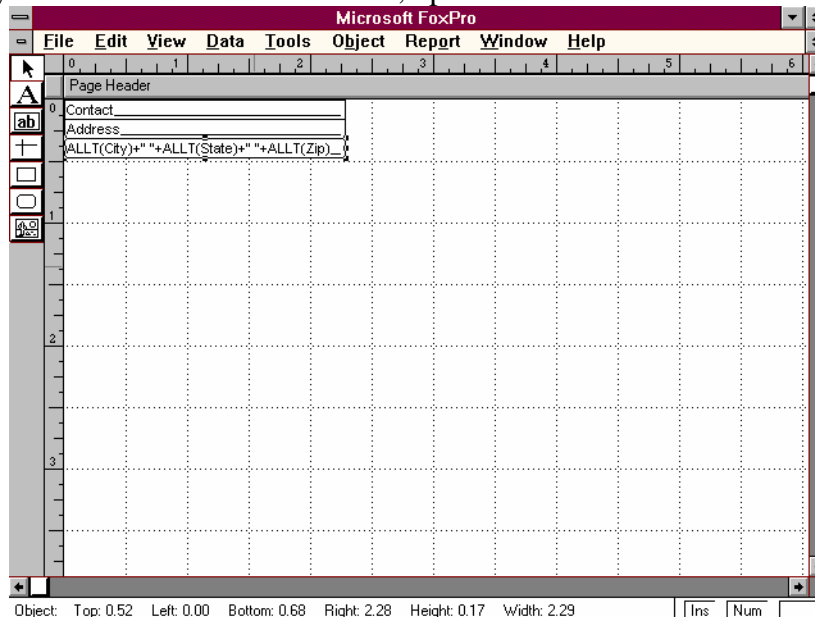
Select **Save** from the File Menu.

Select **Close** from the File Menu.

continued on next page

Select **Print** from the Catalog Manager.
The Catalog Manager Print window will be displayed.
Select **Printer** as the destination.
Click on **OK**.
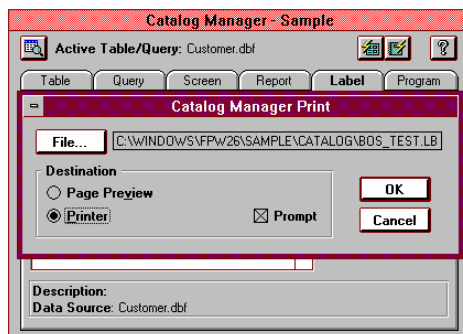
The **Print** window will be displayed.
Click on **Setup**.
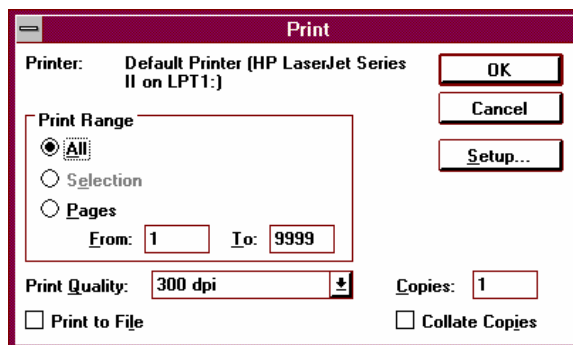
Select the **Generic/Text Only** printer driver.
Click on **OK**
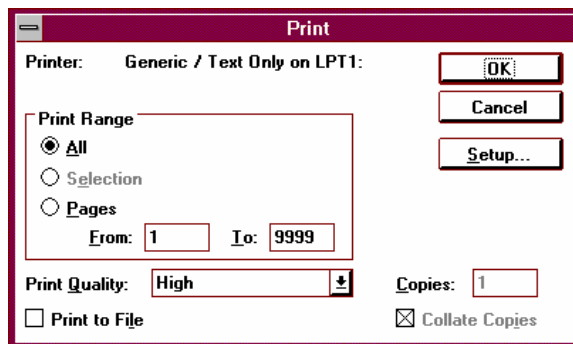
Set the ADDRESS SETUP, located in the Bryce printers Setup Menu, to 66 lines.
You are now ready to print.
Click on **OK**.

Software interface sample: **LOTUS 123 Release 3.1+ for DOS**

Before running 123, the Bryce printer must be installed by choosing **"GENERIC" "no backspace"** for printer specification.

Run 123

Address should be entered in a **single** column, all addresses in file must have the same number of lines (add blank lines if required).

Set the ADDRESS SETUP in the BOS 13K menu to equal the number of lines each record. If page breaks are used, set ADDRESS SETUP in the BOS 13K menu to 1 line more than the number of lines in each record.

Turn **AUTO LINE FEED ON** in the 13K Setup Menu.

Select **PRINT**
Select **PRINTER**
Select **OPTIONS**
Select **OTHER**
Select **UNFORMATTED**
Select **ADVANCED**
Select **AUTOLF**
Select **YES**
Select **QUIT**
Select **QUIT**
Select **GO**

Software interface sample: **MailMiser ver 1.2**

Refer to the MailMiser User's Guide to setup a database for printing labels.
While using MailMiser, a label must be defined in order to print your addresses on the BOS 13K.

Select **System/Printer Functions (9)** from the Main Menu.
　　　The System/Printer Function Menu will be displayed.
　　　　Select **Printer Selection (3)**.
　　　　　The Print Selection Menu will be displayed.
　　　　　Select **BRYCE BOS 12K.**
You will be returned to the System/Printer Functions Menu.
　　　　Enter data according to the following table.

1.	Function "Typing" Keys	
2.	Rebuild Indexes	
3.	Printer Selection	**Bryce BOS 12K**
4.	Reset Printer	**Yes**
5.	Special Printer Codes	
6.	Default Directory	
7.	Color/Monochrome	enter monitor type
8.	Delivery Point Barcode	**NO**
9.	Printer passes for Barcode	**1**
0.	Exit to Main Menu	

Select **Exit to Main Menu (0)**, after you have entered the above data.
The MailMiser Main Menu will be displayed.
　　　Select **Label/Envelope Sizes (8)**.
　　　　Select **Choose from standard label sizes (1)**.
　　　　Select **Direct Image Printer, 1 up, 0 margin**.

MailMiser will ask you if you want to Print a Test Pattern, select **NO** at this time, this will return
you back to the Main Menu.
　　　Select **Label/Envelope Sizes (8)**.
　　　　Select **Edit current label size (2).**
　　　　Enter data according to the following table.

Label Description	**Direct Image Printer, 1 up, 0 margin**
Label Width	**4.5**
Left Margin	**0**
Inches from top of 1 label to top of next label	**1.167 (for a 7 line address)** **approx. .167 per line, at 6 lpi**
Number of Labels across	**1**
Number of Spaces Between Labels	**0**
Lines Per Inch	**6 lpi (default)**
Characters Per Inch	**10 cpi (default)**

Select **Print Labels from the Main Menu** to print addresses.
NOTE: Select <u>NO</u> when the program asks you if you want to print Postnet Barcode.

Software interface sample: **MULTIMATE**

An address may be printed using Multimate Merge Print.

Refer to MULTIMATE and create a merge file. The following is an example of a typical merge document for addressing:

name
title
company
address
city   state   zip

From the main menu, select merge print, When the DOCUMENT PRINT OPTION screen is reached, set up the following section of parameters as shown below:

Enhanced [N]/ Draft [Y]   Y
Print Action Table (PAT)   TTYCRLF
Pauses Between Pages [N or Y]   N
Print Comments [N or Y]   N
Print Document Summary [N or Y]   N
Print This Screen [N or Y]   N
Justification [N or Y or (M)icro]   N
Lines Per Inch [6 or 8]   6
Paper Length (lines per page)   8

The option listed on the document Print Option screen which are not listed above are either not applicable to printing addresses or are specific to your particular installation.

Software interface sample: **MyMailList ver. 1.9.7**

Addresses may be printed on the **BOS 13K** using **MyMailList**.

After entering your data:
Press **F3**, the cursor will move into the **Print Format** window.
        Select **3 1/2 x 15/16 labels**
                        1 label across
                        0 left margin
                        1 copy

        NOTE: MyMailList does not allow you to create a custom label size, therefore you
have two choices;
                1.   3 1/2 x 15/16 labels - this limits you to 6 lines per address and
                35 characters per line.
                2.   Envelope - this also limits you to 6 lines per address, and
                pauses the printer after each address.

Press **F4**, the cursor will move into the **Print** window.
        Enter the Start and Stop Data as required.
Set **ADDRESS SETUP** on the BOS 13K to **6 lines**.
Press **F10 to Print.**

MyMailList is set to print to whatever printer you have connected to Parallel Port #1 (LPT1). If
your BOS 13K is not connected to LPT1, press Ctrl-P to view the Printer Choice Menu., and
select the correct port.

Software Interface sample: **Postalsoft Desktop Mailer ver. 5.0 for Windows**

Installation:

Follow the instructions in the User Manual to install Postalsoft Desktop Mailer. Install the Bryce 10K printer driver that is supplied with Postalsoft Desktop Mailer.

Select **New** from the File Menu.
Select the required fields. (See the new record layout example below.)

When the data is inserted into your database, you must select a template.
Select **Choose Template** from the Print Menu.
Select **New.**
In the example below, a template named bryce.tpl has been created.

continued on next page

When the template is created, you must choose a form.
Select **Choose Form** from the Print Menu.
Select **New** from the Choose Form for Printing Menu.
Enter the parameters into the **Edit Form** window as shown below.

```
┌─────────────────────────────────────────────────────────────┐
│ ⊟                    Edit Form                                │
├─────────────────────────────────────────────────────────────┤
│  ┌───┐                          ┌───┐                        │
│  │ 1 │ Labels across page       │ 1 │ Labels down page       │
│  └───┘                          └───┘                        │
│  ┌─────┐                        ┌─────┐                      │
│  │ 4.2 │   Width of label       │ 1.2 │   Height of label    │
│  └─────┘                        └─────┘                      │
│  ┌─────┐                        ┌───────┐                    │
│  │ 0.0 │  Left margin (to paper edge) │ 0.000 │  Top margin  │
│  └─────┘                        └───────┘                    │
│  ┌───────┐                      ┌───────┐                    │
│  │ 0.000 │  Width between labels│ 0.000 │  Height between labels│
│  └───────┘                      └───────┘                    │
│  ┌─────┐                        ┌─────┐                      │
│  │ 4.2 │   Form width           │ 1.2 │   Form height        │
│  └─────┘                        └─────┘                      │
│                                                              │
│  Form name:      ┌Units──────┐ ┌Form Kind──────┐ ┌Orientation─┐│
│  ┌─────────────┐ │ ◉ Inches  │ │ ◉ Continuous  │ │ ◉ Portrait ││
│  │ Bryce.frm   │ │ ○ Centimeters│ ○ Sheet       │ │ ○ Landscape││
│  └─────────────┘ └───────────┘ └───────────────┘ └────────────┘│
│  Description:                                                 │
│  ┌─────────────────────────────────────────────────────────┐ │
│  │ Label for Bryce 10K, 10K-E, 12K, 16K & 20K              │ │
│  └─────────────────────────────────────────────────────────┘ │
│  ┌────────┐  ┌────────┐  ┌──────────┐  ┌────────┐             │
│  │ Save   │  │ Cancel │  │ Options… │  │ Help   │             │
│  └────────┘  └────────┘  └──────────┘  └────────┘             │
└─────────────────────────────────────────────────────────────┘
```

The next step is to select a printer.
Select Choose Printer from the Print Menu.
Select **Bryce 10K on LPT1** (LPT1 is used as an example, the actual printer port that you have the Bryce 10K assigned to in Windows will be displayed here.)
Click on OK

Set the ADDRESS SETUP, located in the Bryce printers Setup Menu, to 8 lines.

You are now ready to print.
Select **Print Labels** from the Print Menu.

Software Interface sample: **PreSort Pro by MCS version 2.4 for Windows**

Installation:

Follow the instructions in the User Manual to install PreSort Pro. Install the Standard/Text only printer driver that is supplied with PreSort Pro.

Select **New** from the File Menu.

Select the required fields. (See the new record layout example below.)

When the data is inserted into your database, you must select a template.
Select **Choose Template** from the Print Menu.
In the example below, a template named bos_test.tpl has been created. Notice that there are no printer control codes displayed at the beginning or end of the template.

continued on next page

When the template is created, you must choose a form.
Select **Choose Form** from the Print Menu.
Select **bryce.frm** from the Choose Form for Printing Menu (shown below).
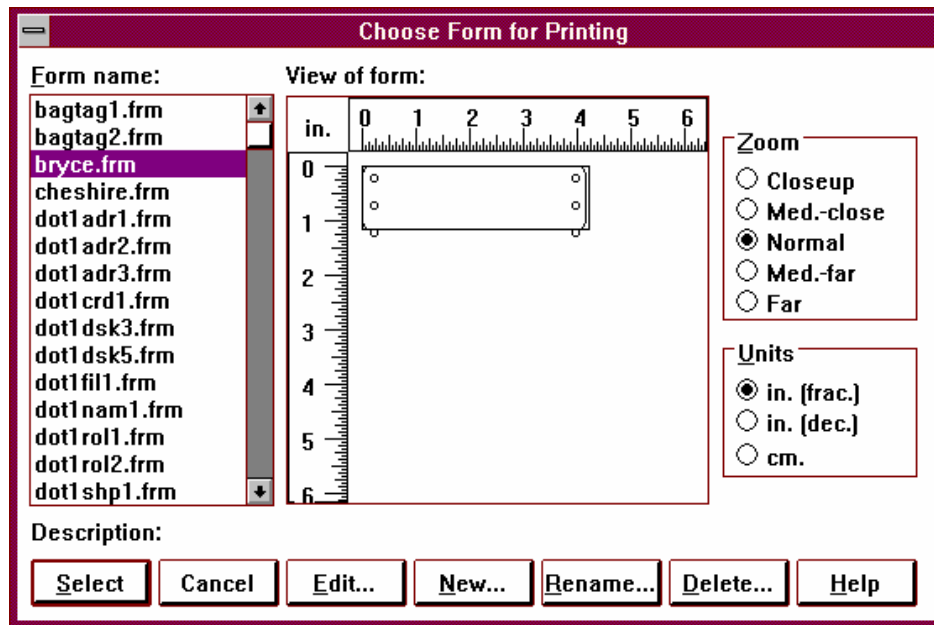
The next step is to select a printer.
Select Choose Printer from the Print Menu.
Select **Standard/Text Only**, (as shown below).
Click on OK

Set the ADDRESS SETUP, located in the Bryce printers Setup Menu, to 8 lines.

You are now ready to print.
Select **Print Labels** from the Print Menu.

Software interface sample: **RAPIDFILE**

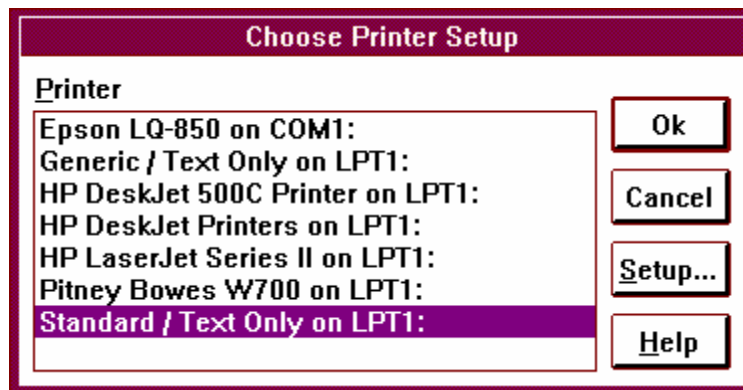Before running RAPID FILE, a printer driver must be loaded. This is done by running RAPID FILE's Printer program from DOS as explained in the RAPID FILE manual.

The printer file to select is called **GENERIC**, and must be set up as one of the printer devices with appropriate I/O port settings.

From within RAPID FILE when printing addresses:

1.   Select FILE from the main menu
2.   Select **RETRIEVE FILE or CREATE** (If you choose to create, enter data)
3.   Select **LAYOUT**
4.   Select **LAYOUT TYPE**
5.   Select **LABEL**
6.   When asked if you want to design a label - Select **YES**

        A LABEL WILL BE DISPLAYED IN THE CENTER OF THE SCREEN

7.   Press **F10**
        Select **SHOW FIELD**, Fields will be displayed on the right side of the screen.
        Select **FIELD**
                Use arrows to set field width.
                Use arrows to drag field into position.
        REPEAT Step 7 until all fields are placed
8.   Press **F9** to Implement
9.   Select **PRINT** from main menu
10.   Select **DESTINATION**
11.   Select BEGIN PRINTING

Software interface sample: **REFLEX ver. 2.0**

Referring to the REFLEX manual, run REFLEX, load a file, or create a file.

Create the fields required.

Select **Reports & Labels** from the **Views Menu**.
        This will bring you to the **Report Design** display.

Select **Make Labels** from the **Report Menu**.

Select **Customize Labels** from the **Report Menu**.

Set: Label Width: **45**
        Label Height: **7**
        Lines between labels: **0**
        Spaces between labels: **0**
        Labels across page: **1**
        Compress blank lines: **Yes or No**
        Left margin: **0**
        Setup String: **(blank)**
Select **Proceed**.

Place cursor at the beginning of the first line of the label.

Enter field names into label.

Select **Local Properties** from the **Report Menu** when you are done entering the field names into the label.

Set the field widths as required, set State field width to two (2) characters.

Click on State and Zip fields, and move to create a space between the City and State field, and the State and Zip field.

You are now ready to print addresses on your BOS 13K.

Select **Print** from the **Utilities Menu**.

Set Address Setup on the BOS 13K to **seven (7) lines**.

Select **Print to Printer**.

Select **Proceed**.

Software interface sample: **WORDPERFECT 6.0**

Addresses may be printed with WORDPERFECT 6.0 using **merge printing**. This requires the creation of a **primary** and a **secondary** file. Refer to your WORDPERFECT manual for instructions.

The following is an example of a typical merge **primary** file for addressing:

{FIELD}1"
{FIELD}2"
{FIELD}3"
{FIELD}4"
{FIELD}5"

The following is an example of a typical **secondary** file for addressing:

John Doe{END FIELD}
123 Main Street{END FIELD}
Anytown, CT. 12345-6789{END RECORD}

Before performing the actual merging of data from your secondary file, several options **must** be chosen:

Set Margins	**Top**	**0"**
	Bottom	**0"**
	Left	**0"**
	Right	**0"**

You may now merge the two files.

From the Tools menu, select **Merge**
    Select **Run**
    Enter Form filename (Primary File)
    Enter Data filename (Secondary File)
    Select **Merge**

From the File menu, select **Print/Fax**
    Select **DOS Text Printer**
    Select **Edit**, and insure correct port is selected for the DOS Text Printer

You may now print address lists on your BOS 13K Print Station.

Software interface sample: **WORDSTAR FOR DOS ver. 7.0**

From the **File Menu** select **New**.

From the **Layout Menu** select **Page**.

Enter the following settings:

       Odd Offset   **0.00**
       Even Offset   **0.00**
       Top   **0.00**
       Bottom   **0.00**
       Header   **0.00**
       Footer   **0.00**
       Orientation   **Portrait**
       Page Length   **1.34**
       Paper Bin   **Leave Blank**

Select **OK**.

The screen should now display the following information:
.poo   .00"
.poe   .00"
.mt   .00"
.mb   .00"
.hm   .00"
.fm   .00"
.pl   .00"
.pl   1.17"

Enter in the data for each record. When a record is complete, press **ENTER** until a page break is displayed on the screen (a solid horizontal white line).
Once the page break is displayed, you can enter the next record.
Repeat this process to enter all records.

To Print:

Set the BOS 13K **Address Setup** to eight (8) lines of address.
Select **Change Printer** from the **File Menu**.
Select **Draft Printer**.
Select **OK**.
Select **Print** from the **File Menu**.

POWER PRINT for the MACINTOSH

PowerPrint by GDT Softworks consists of software printer drivers and a high speed serial-to-parallel adapter which allows for a virtually transparent connection between your Macintosh and the BOS 13K.

Installation:

Follow the instructions in the User Manual to install PowerPrint. Select the **LaserJet 4** printer driver to install for use with the BOS13K.

Activating Your Driver:

• Go to the Apple menu and select **Chooser**.

• Select the **LaserJet 4** printer driver.

• Click on the serial port to which you have the BOS 13K connected, either the modem (phone) or printer icon.

NOTE: *If you are connecting your printer cable to the printer port, Appletalk must be set to "inactive".*

• Click on the box labeled **Cartridges**. A Cartridge Mapping window will be displayed. Map the following fonts:
  Mac Font called Courier to print as the HP Font Courier.
  Mac Font called Helvetica to print as the HP Font Arial.
  Mac Font called Times to print as the HP Font Times New.
• Click on **OK**.
• Close the Chooser by clicking on the close box in the upper left corner. The Address Printer is now configured to print with the PowerPrint driver.

Printing:

Go to the **Setup Menu** on the BOS13K and turn on **Auto Line Feed**.

While in an application, go to the **File** menu and select **Page Setup**. Select:
• Paper = **US Letter**
• Reduce or Enlarge = **100%**
• Page Orientation = **Portrait**
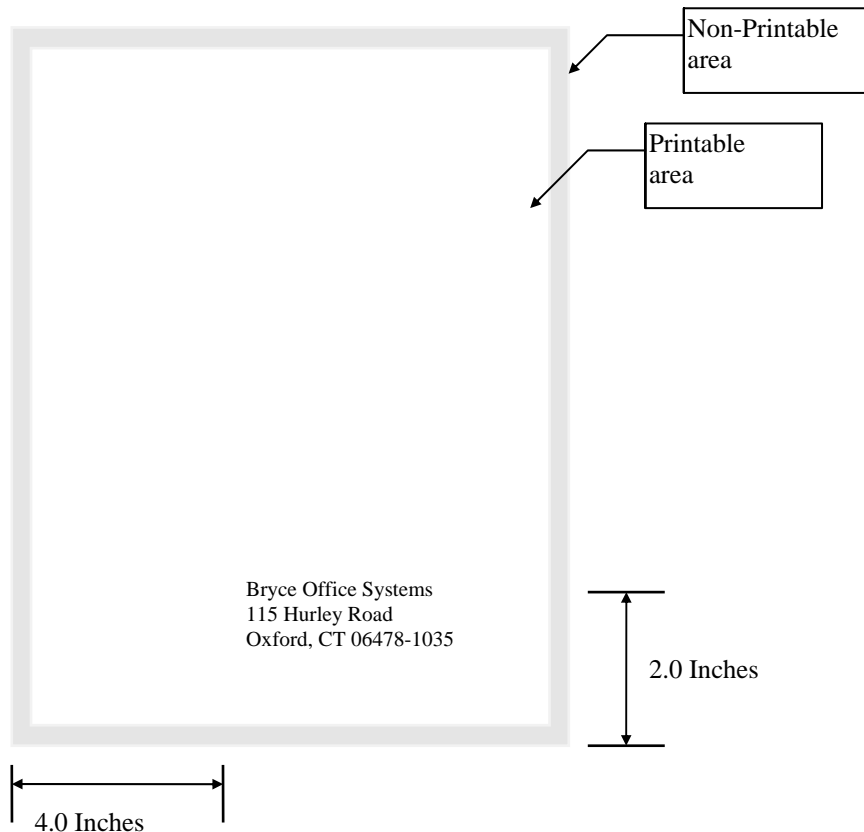• Printer Effects = **Fractional Widths**
Click on **OK**

POWER PRINT for the MACINTOSH (Continued)

Page Setup:

- Select **Show** from the **Layout** menu, then select **Non-Printable** Area.
- Set page width to 8.5 Inches (215.9 mm).
- Set page length to 11 inches (279.4 mm).

Measure the position of your address from the bottom edge of the paper, just as you would from the bottom edge of your mail piece. See example shown below.

8.5 x 11 Inches

Non-Printable
area

Printable
area

Bryce Office Systems
115 Hurley Road
Oxford, CT 06478-1035

2.0 Inches

4.0 Inches

Go to **File** menu and select **Print**. Select:
- Print Mode = Draft
- Feed = Automatic

Click on **Print**.

Computer setup sample: **IBM Mini's (System 34, 36, 38) & AS400**

To use the BOS 13K with any IBM minicomputer or mainframe, it is necessary to interface through some kind of protocol converter. This may be one of two types of systems; either an IBM compatible micro with an emulation card, or a stand alone protocol converter such as is available from Black Box Corp. in Pittsburgh, PA (i.e., model PQ-6 RO). In either case the installation is very similar.

1.   The protocol conversion device must be connected to the IBM computer with the appropriate   cable.

2.   After deciding on a free work station address to be used for the BOS 13K, the system
        configuration must be altered to setup the work station address and port as an IBM 5256
        printer.

3.   The emulation system must be setup at the same workstation address and must be setup
for   IBM Proprinter II emulation.

        For a system 36 installation, with IBM advanced emulation, the following is the correct
        procedure to follow on the PC:

        A.   Boot the PC with DOS
        B.   Running off the advanced emulation program disk, type "Config DP5250.dat"
        C.   Select 2 Emulation sessions
        D.   Select the appropriate keyboard
        E   Set workstation addresses for the two sessions, as configured on the system 36
        F.   Set 5256 Printer Emulation
        G.   Select IBM Proprinter II
        H.   Save profile data and exit

4.   A procedure must be written and run which sets the printer port for the page length of 6
        lines (BOS 13K with LCD SETUP MENU to set up the ADDRESS SETUP to   6).

5.   An RPG program will probably be necessary on the system 36 to produce a data format
which is "one-up" label compatible.

6.   You may now print address lists on your BOS 13K.

Software interface sample: **MICROSOFT WORD FOR WINDOWS ver. 2.0**

Using you mouse Select FILE

        Inside the pull down menu for File, Select NEW

          Once New has been selected a pop up window will appear.

        Scroll through the available documents using the down arrow, Select MAILLABL

        Now Select OK

        Now a new pop up window appears called Mailing Labels

        Inside the Mailing Labels section, Select DOT MATRIX

        Now another new pop up window appears called Dot Matrix Printer Label Sizes.

        Scroll through the selection of product numbers for Avery Dot Matrix Labels,

        Select 4600 ADDRESS

        Then Select OK

        Now another new pop up window appears called MicroSoft Word.

        Select SINGLE LABEL

        Now a new pop up window appears called Mailing Labels which depicts a sample

        label for six (6) lines.

        Type data into each line of the label address, TAB to go to NEXT LINE

        When address data is completely entered, Select DONE

        To print the sample label, select FILE

        Inside the pull down menu for File, Select PRINT SETUP

        Now a new pop up window appears called Print Setup

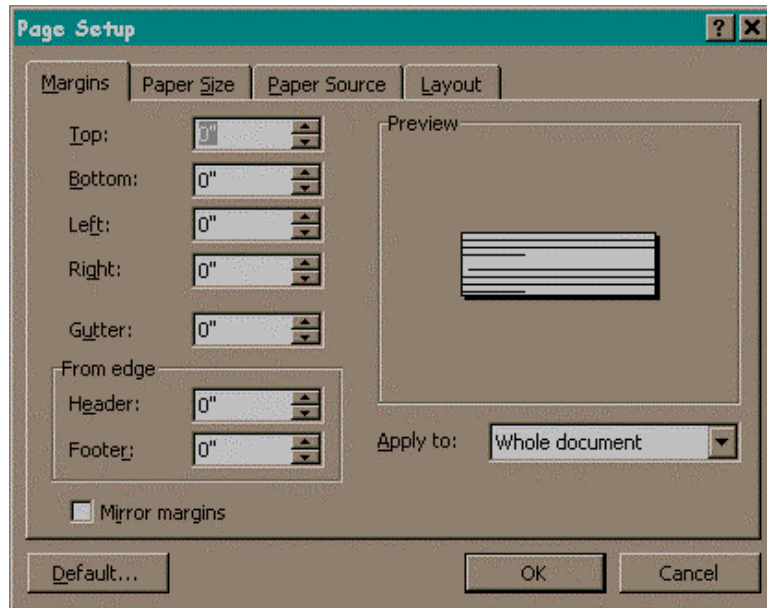   Select GENERIC/TEXT ONLY ON LPT1

        Select OK

        Select FILE

        Inside the pull down menu for File, Select PRINT

Software interface sample**:**   **Word97 for Windows 95**
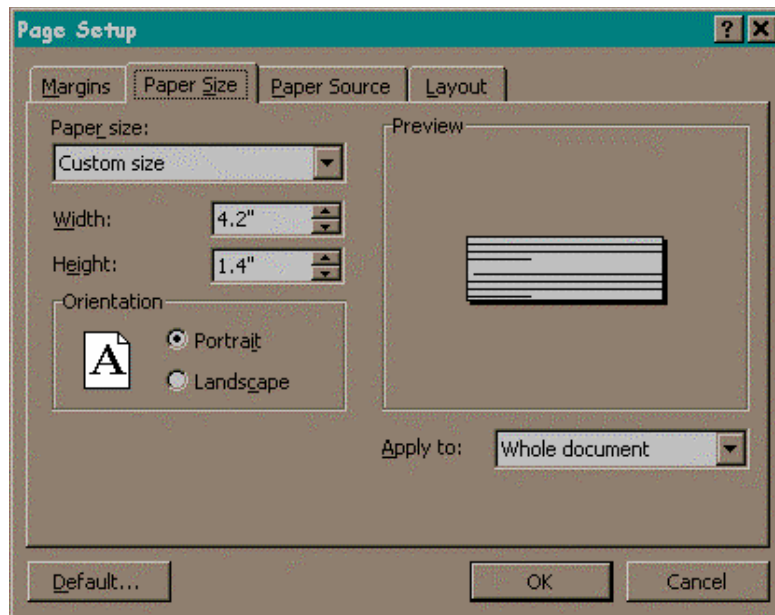
Select **Page Setup** from the FILE menu.
Select the **Margins tab**, and set ALL margins to zero (0)

Select the **Paper size tab**, then select **Custom** from the Paper size text box.

Set the page width to 4.2"
Set the page height to 1.4"

Select OK. After you select OK, you may see a warning similar to the warning shown below. Click on the **Ignore** button.

Select **Page Layout** from the VIEW menu, and your page should look similar to the example show below.

To print to the 13K printer:

> **Note:** Make sure that the ADDRESS SETUP option in the Bryce Setup Menu is set to Nine (9) lines or greater.

Select **Options** from the TOOLS menu.

Select the **Compatibility** Tab from the OPTION dialog box. Select **Custom** from the RECOMMENDED OPTIONS FOR: pull down menu. Check the box next to the Use Printer Metrics to layout document. Verify that none of the other boxes have a check inside. The dialog box should look like the options box below.
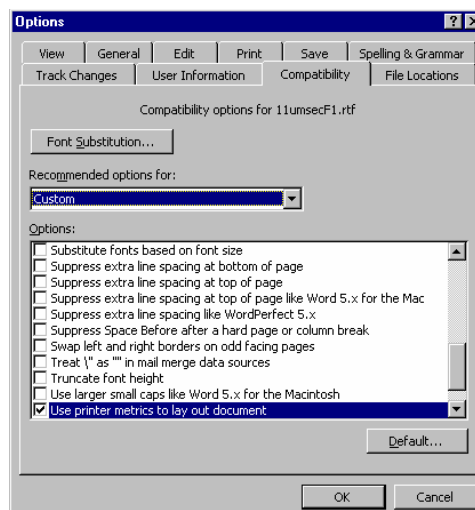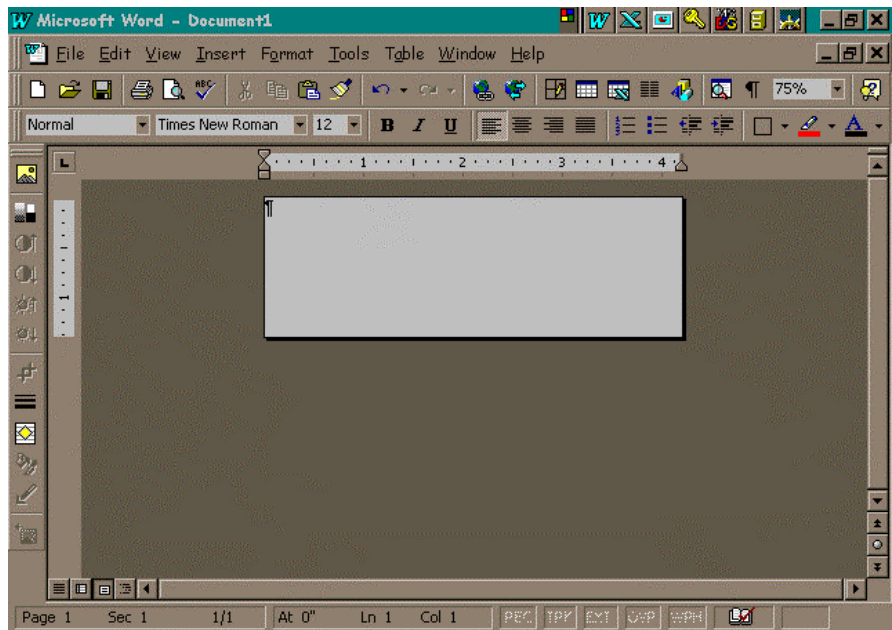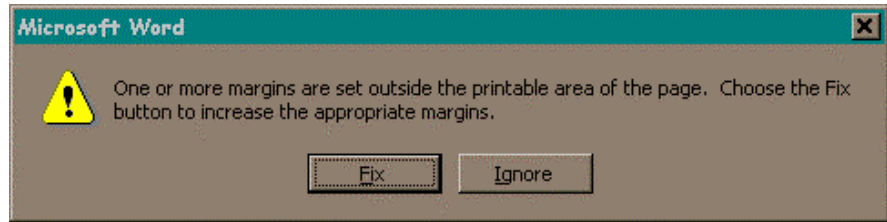
To make a Mail Merge select **Mail Merge** from the TOOLS menu.
The Mail Merge Helper window similar to the one to the right will appear. Select the **Create** pull down menu.
Select "**Form Letter**". Select the "**Active Window"** as the document that you wish to use**.**
Select "**Get Data**" from the Mail Merge Helper.
Select the file you wish to merge with your MS Word document. You will get a message similar to the one below stating "**Word found no merge fields in your main document"**. Click on the "**Edit Main Document**" button.
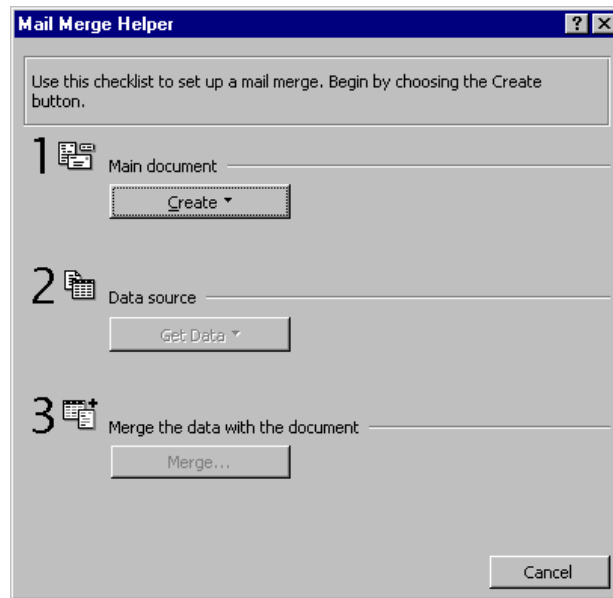Move the cursor to the position you would like your address to begin.
Select "**Insert Merge Field**" from the toolbar.
Insert the fields you want on the form.
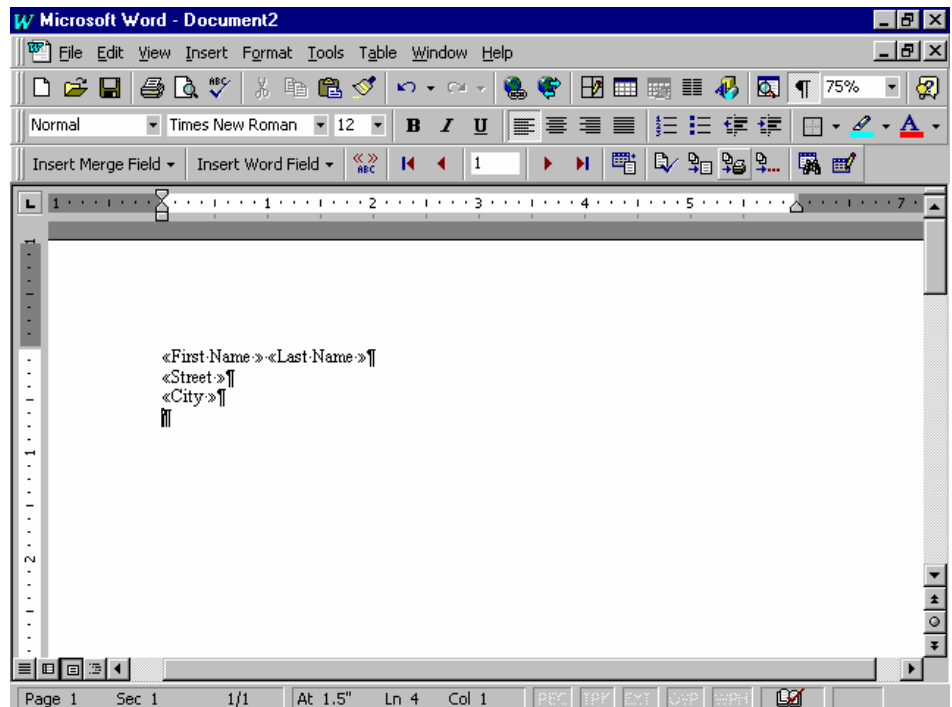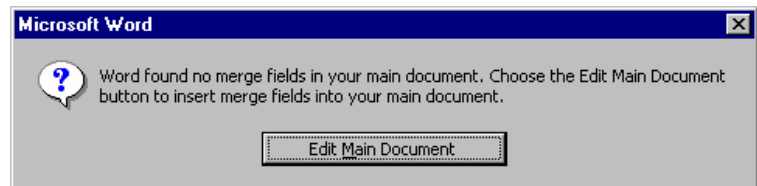Select the Merge to Printer icon from the toolbar.
Your page should look similar tot he last example below.

The Print dialog box will appear.
Make sure that the **Generic/Text only** printer is selected.
Click **OK** to print.

AGENCY REGULATORY NOTICES

Notice: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Federal Communications Commission Compliance

"This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
- 1). This device may not cause harmful interference, and
- 2). This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with FCC Rules Part 15 subpart B Class B for a digital device. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful 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: Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.

This device complies with the requirements of the following standards:

Complies to "CE" Mark requirements of:

- **EMC Directive 89/336/EEC and as AMENDED**
- **Low Voltage Directives 73/23/EEC and as Ammended**

EN 55022, CLASS B,

"Conducted and Radiated Emissions"

EN 50081-1: 1992

"Radiated Emissions"

EN 50082-1:1992,

"General Immunity Standard: Residential, Commercial, and Light Industry"

IEC 801- 2: 1984

"Electrostatic Discharge"

IEC 801- 4: 1988

"Electrical Fast Transients, I/O and Power"

EN 50140 (IEC 801-3:1984),

"Radiated Susceptibility"

Canadian DOC Compliance.

"This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

UL Standard 1950, 3rd Edition,

"Information Technology Equipment Including Electrical Business Equipment"

CSA Standard C22.2 No. 950-95,

"Safety of Information Technology Equipment Including Electrical Business Equipment"

EN 60950: 1992 including Amendments

EN6095 +A1:1992; +A2:1993; +A3:1995; +A4:1996
 "Safety of Information Technology Equipment Including Electrical Business Equipment"

DIN:EN 60950 VDE 0805-1997, For GS Mark, and as AMENDED

 "Safety of Information Technology Equipment Including Electrical Business Equipment"
Der Drucker ist ein Geraet der Schutzklasse 1.

Dimensions and Weight

Height:	13 inches	33.1 cm
Width.:	19 inches	48.3 cm
Depth:	17 inches	43.2 cm
Weight:	50lbs. (22.7 kg) including the high capacity print cartridge & Paper Catch Assembly.	

Electrical

Voltage: Selectable voltages: 100v, 120v , 220v, and 240v
Fuse Type (100 – 120 volts AC + or - 10%):   One 3AG. 2 Amp Slo-Blo fuse, at 250 volts, is required/provided.
Frequency: 60 Hertz. + or - 3 Hz. Automatic frequency selection for other voltages.
Power Consumption: 126 Watts   430 Btu/hr.
Fuse Type (220 – 240 volts AC + or - 10%):   Two 5 x 20mm. 1.5 Amp Slo-Blo fuses, at 250 volts, one for each leg, is required/provided.

Elecktrische Daten (input)

Eingangsspannung (Voltage):   220-240 VAC
Eingangsstrom (Current):   0.5A
Nennfrequenz (Frequency):   50HZ
A Sicherungs Nenndaten (Fuse rating:) 1.5 A 250VAC.

Warnung: Fuer kontinuierlichen Feuerschutz, sollten diw Sicherungen nur mit einer gleichen
Typs und der gleichen Einstufung ersetzt werden.
Achtung: Zweipolige bzw.Neutralleiter Sicherung.

Media Size

Media Thickness	Minimum	Maximum
	0.003 inches(0.0762 mm)	1/4" (6.350 mm)
Paper Extents	**Width**	**Length**
Minimum	3" (76 mm)	5" (127 mm)
Maximum	12.5" (330 mm)	15" (390 mm)

Environmental Conditions.

Operating. (Power On.),	Temperature. 55.F - 95.F (12.C - 35.C),
	Humidity. 8% - 80%
	Die maximale Umgebungstemperatur betraegt 35C.
Non Operating. (Power Off.),	Temperature. 42.F - 100.F (5.C - 40.C),
	Humidity. 10% - 90%
Noise Level.	Sound Level: Less than 65 dBA (re 20µPa), A-weighted sound pressure level at the operator position. Measured in accordance with applicable ANSI and ISO standards.

Maximum Printing Area

Vertically	Horizontally
15 inches (38.1 cm)	9.4 inches (23.8 cm)

Print Density and Resolution.

Draft:-	300 x 300 Dots per inch. -	Light.
Letter:-	300 x 600 Dots per inch. -	Medium.
Executive:-	600 x 600 Dots per inch. -	Dark.

Maximum Point Size

Smallest	Largest
4 point	30 point

Printer Speed

Bryce 13K
Based on 18 characters per line, 12 point, 3 lines per address and no barcode.

Media	Draft	Letter	Executive	Margin
# 10	11,000	11,000	10,000	5 inch (12.7 cm)
3x5	13,000	13,000	11,000	4 inch (10.16 cm)

Based on 18 characters per line, 12 point, 5 lines per address and no barcode.

Media	Draft	Letter	Executive	Margin
# 10	7,400	7,400	5,800	5 inch (12.7 cm)

The Interface Panel

The interface panel is located on the back of the machine. It contains the main power switch, the power receptacle and fuse. The interface ports (parallel and serial) are the interface connections between the 13K and your computer.

1.   Connect the line cord from the printer receptacle to a properly grounded outlet box. Do not use an adapter plug. Avoid using outlets that are controlled by wall switches and shared with other equipment.

2.   Connect the interface cable from the computer to the appropriate connector on the printer interface panel. The typical cable length is six (6) feet long (182. 9 cm) for parallel and fifteen (15) feet (457.2 cm) long for serial.

Power Supply Cords (Line Cords)

Appliance inlet is the main disconnect device.

Der Geraetestecker dient zur Trennung der Netzspannung.

"Bei Gefahr Netzstecker ziehen."

In the United Kingdom:

☠ **WARNING :-** *THIS EQUIPMENT MUST BE EARTHED. (GROUNDED.)*

The cores in the main leads are colored in accordance with the following code:
- green and yellow   earth
- blue: neutral
- brown   live
- the lead which is colored green and yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol, or colored green and yellow.
- the lead which is colored blue must be connected to the terminal which is marked with the letter N or colored black.
- the lead which is colored brown must be connected to the terminal which is marked with the letter L or colored red.

In Denmark

Appliances which are delivered without a plug must be provided with a visible tag with the following text:

Vigtigt!

Ledern med gron/gul isolation ma kun tilslutters en klemme maerket eller
For tilslutning af de ovrige ledere, se medfolgende installationsvejledning.

In the **U.S.A.**

A molded three pin plug and socket cable is provided with the printer.

DELIVERY POINT BAR CODE

NAIC Certification

This Address Printer is equipped with firmware for printing the United States Postal Service (USPS) Delivery Point Bar Code (DPBC). The printer is Certified by the National Address Information Center (NAIC). Certification from the NAIC indicates the printed POSTNET Bar - Code meets the required standards for letter size mail to receive USPS Delivery Point Bar Coded rates.

Delivery Point Bar Code

The Address Printer uses the data sent down on the last line to print the DPBC. Specifications for a valid addresses can be found in the Domestic Mail Manual (DMM).

Alternate Address Formats

The option to send the Address Printer a ZIP + 4 + 2 or ZIP + 4 + 3 address to print a Delivery Point Bar Code is available. Only the addresses with ZIP + 4 or ZIP + 4 + 3 digits are allowed by the USPS to appear in the address block.

Valid Address Formats

Address ZIP Codes	Data Sent to Printer	Printed in Address Block	Bar - Code Printed
ZIP + 4 + 2*	98765-1234~12	98765-1234	DPBC
ZIP + 4 + 3*	98765-1234~123	98765-1234	DPBC
ZIP + 4 + 3	98765-1234123	98765-1234123	DPBC
Illegal Format			
ZIP + 4 + 2	98765-123412	98765-123412	No Bar - Code

    * Add the Tilde (~) after the ZIP + 4 digits so the 2- or 3 - digit add on will not be printed in the address block.

ZIP + 4 + 2

The Address Printer will determine the correction digit and print the DPBC according to the ZIP code received. Using the ZIP + 4 + 2 format requires that the Tilde (~) character be sent between the ZIP + 4 and 2- digit characters. Only ZIP + 4 digits will be printed in the address block.

ZIP + 4 + 3

The Address Printer will print the DPBC according to the ZIP code received. Two formats of printing the Zip Code in the address block are available. First option is to print all the digits of the ZIP + 4 + 3 in the address block. Second option is to only print the ZIP + 4 digits in the address block, by placing the Tilde (~) character between the ZIP + 4 and 3- digit characters.

Glossary

baud rate

The rate at which data is transferred between the computer and the printer. The computer and printer must be set at the same baud rate for information to transfer correctly.

cable

Wires that carry the information between the computer and the printer.

Centronic parallel interface

A device for connecting printers and other peripheral devices to a computer. It transmits a full byte at a time.

Character

A printable letter or symbol.

character height

The height of a uppercase letter. A character height is measured in points.

characters per inch

The number of character printed in a horizontal inch. Also called pitch.

character set

The set of characters or symbols that make up a language.

clean print cartridge

Describes the process of removing dried ink from the nozzles of the ink jet cartridge.

configuration

The settings used by the printer to communicate with the computer. Also the internal settings in the printer that control the print job.

control code

The instructions sent to the printer to describe how to perform the print job.

control panel

The buttons and display that are used to manually change the printers settings.

cpi

See **characters per inch**.

data communications

The sending of data from the computer to a peripheral device i.e. the printer.

dots per inch

The number of ink dots printed in one horizontal inch. The larger the number the better the resolution of print.

double feeding

Two or more pieces of media feed at the same time or without separation.

Dpi

See **dots per inch**.

draft quality

Print resolution using 150 dpi which saves ink and allows faster printing of a document.

Drivers

A file used by the computers software to communicate commands and information that the printer needs to layout and print a document.

embedded printer commands

Commands sent in a record or document to instruct the printer to change printing options.

EPROM

Electronic Programmable Read Only Memory

escape character

A special non-printable character (ESC / ➔) used to instruct the printer to change printing options.

escape sequence

Commands sent beginning with the escape character that instruct the printer to change printing options: fonts, page orientation, etc.

feed gap

Opening between the ends of the H-Block Assemblies and the Feed Rollers so the media is fed one at a time.

font

A set of printable characters with consistent style and characteristics.

Grounded

A electrical circuit that has a voltage of zero.

Handshaking

A method for the computer to communicate with peripheral devices to ensure complete transfer of information.

hex dump

A printer option that allows all the information and commands sent to the printer are printed as base 16 digits.

Internal test address message

The preprogrammed Address that is printed when the Test Env. button is pressed.

interface cable

The cable that connects the printer or other device to the computer.

interface connector

The connectors on both ends of the interface cable that insert into the interface ports.

internal fonts

Resident or built-in fonts that reside inside the printer.

Jam

See Paper Jam.

letter quality

Print resolution using 200 dpi which saves ink and provides a high quality document.

lines per inch

The number of lines printed in one vertical inch.

Menu directories

The list of available printer controls that appear on the bottom of the LCD display. A directory can contain other directories called sub-directories.

Offline

The printer will no longer respond to information sent from the computer.

Online

The printer will accept and respond to information sent from the computer.

outline fonts

Scaleable printer fonts.

paper jam

When media gets stuck in the printer.

Parity

An error checking method used when communicating between the computer and a peripheral device.

PCL commands

A standard printer language developed of commands to access printer features or options.

point size

A measurement standard for Character Height. One point represents one seventy-seconds of an inch.

Port

See **Printer Interface Port**.

Postal regulations

Rules and guidelines setup by the United States Postal Service (USPS) for mail.

power socket

The socket on the back of the printer where the line cord is connected.

print cartridge

The cartridge that contains the ink for printing.

print quality

The quality of print, such as the resolution, sharpness of the image or font.

printer driver

See **Drivers**.

Record

A collection of related fields that make up the name and address of an individual in a mailing-list file.

RS-232 serial interface

A standard serial interface for connecting the computer to peripheral devices.

sans serif

A font typeface that contains no serifs or finishing strokes on the top or bottom of the characters.

scaleable fonts

Outline printer fonts of characters and symbols that are stored in a mathematical form and are able to be enlarged or reduced.

Spacing

The relative spacing between characters.

Stuffed media

Media that is already filled and sealed for delivery.

sub - directories

A directory within a directory.

Troubleshooting

The process of finding the cause of a problem so that a solution can be found.

External Fonts & Supplies

The following list of supplies and font cards are available through your local Bryce Office Systems dealer.

	Description	**Part Number**
	Bin Extension	03-00257-501

Font Card:

	Description	Part Number
	Alpine	56-96000-001
	Aurora	56-96001-001
	Calico	56-96003-001
	Centurion	56-96022-001
	Dingbat #2	56-96005-001
	Eureka	56-96006-001
	Indio	56-96008-001
	Memo	56-96010-001
	Mettler	56-96011-001
	Oakland	56-96012-001
	OCR A	56-96013-001
	Palomar	56-96014-001
	Parker	56-96021-001
	Santee	56-96016-001
	Stockton	56-96019-001
	3 of 9 Barcode	56-96020-001
	Novarese	56-96031-001

Bryce
Office Systems

7 Edmond Road
Newtown, CT 06740
U.S.A.
Phone: 1 - (203) 426 – 7440
Fax: 1 - (203) 460 – 5294
http:\\www.BryceUSA.com

13K