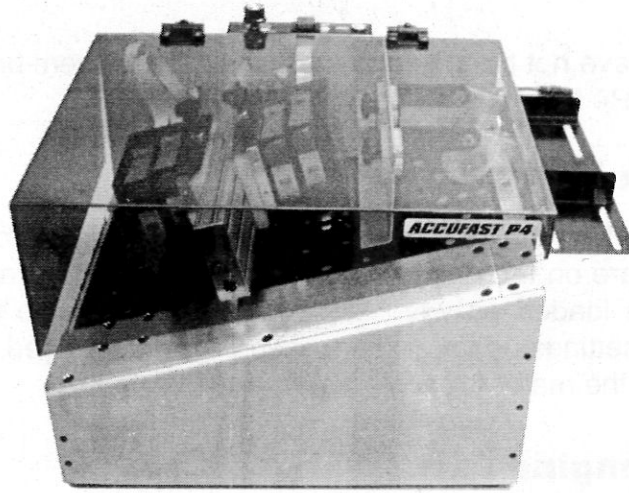


ACCUFAST® P4

jet.engine GUI Printing Guide



Contents

Getting Started.....	2	Printing PostNet Barcode	15
Starting the jet.engine GUI.....	2	Printing Graphics.....	17
Setting Up the Imager	2	Printing Indicia.....	18
Configuration Settings.....	6	Number Generator	19
Loading data.....	7	Using Message Lines	20
Print Manager Tab	8	Mail Piece layout Review.....	21
Layout Tools Overview.....	9	Using Field Blocks.....	22
Layout Tools Defined	10	Sort Breaks.....	24
Mail Piece layout.....	11	To Begin Printing.....	27
Block Properties.....	13	Advanced Techniques.....	29
Using record Blocks.....	14	Specialty Inks.....	31
		Automatic Capping.....	31

Getting Started

This manual assumes that:


1. The USB Ethernet Adapter driver has been loaded.
2. The jet.engine GUI software has been installed.
3. The Network Connections Settings have been configured.
4. The P4 has been assembled, transports paper, and is connected to the host computer.

If these actions have not been taken, stop and tend to them before going any further using the P4 Mechanical Operating Manual.

Check Factory Settings

The operating software contains your machine's configuration file. When you loaded the software on the host computer the settings from factory final test and acceptance were loaded as well. As you run through the following sections, checking these settings. If a setting needs to be changed, follow the procedures outlined in the manual.

Starting the jet.engine GUI


1. Click on Start – the Start menu will appear
2. Place mouse pointer on All Programs – the Programs menu will appear
3. Place mouse pointer on jet.engine GUI – a smaller menu will appear
4. Click on the jet.engine GUI icon:  Launch jet.engine.gui

To start the jet.engine GUI software faster you can create a desktop shortcut, pin it to the Start menu, or, add it to the Quick Launch toolbar on the Taskbar.

To create a desktop shortcut: right click on the jet.engine GUI program on the Programs menu and select copy. Then right click on an open area on your desktop and select paste. A jet.engine GUI shortcut will be created on your desktop.

To pin to the Start menu: right click on the jet.engine GUI program on the Programs menu and select Pin to Start menu. The jet.engine GUI program will then appear on the upper part of the Start menu.

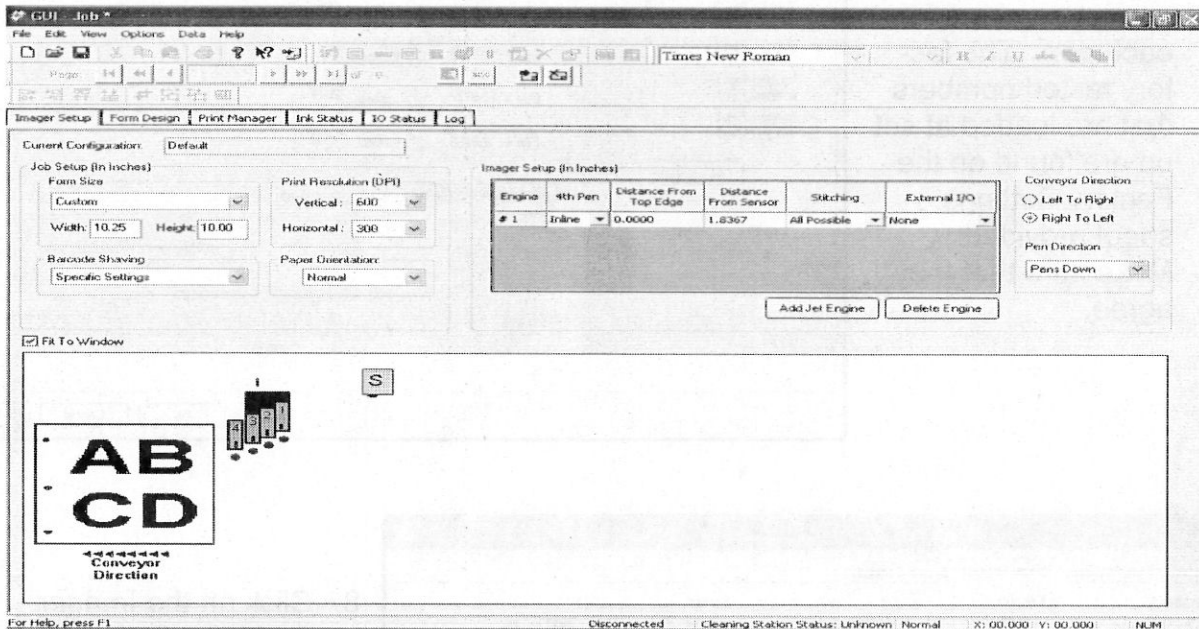
To add to the Quick Launch toolbar on the Taskbar: click and hold on the jet.engine GUI program on the Programs menu and drag the selection to the

Quick Launch toolbar and release. A jet.engine GUI icon  will appear on the Quick Launch toolbar.

Setting up the Imager

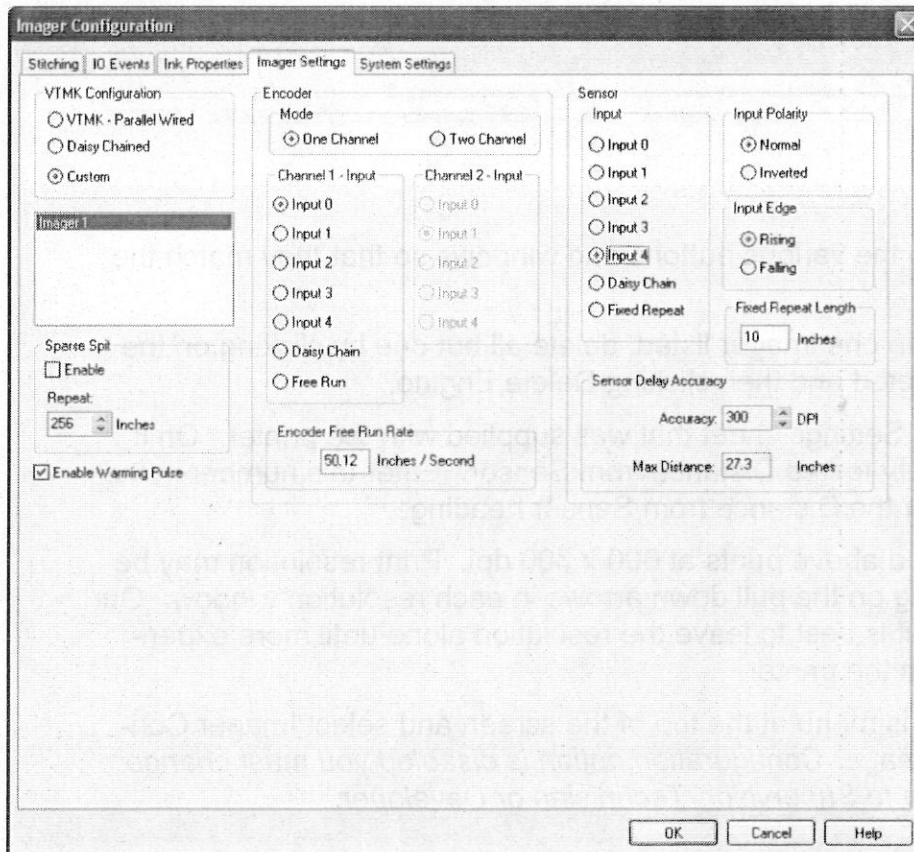
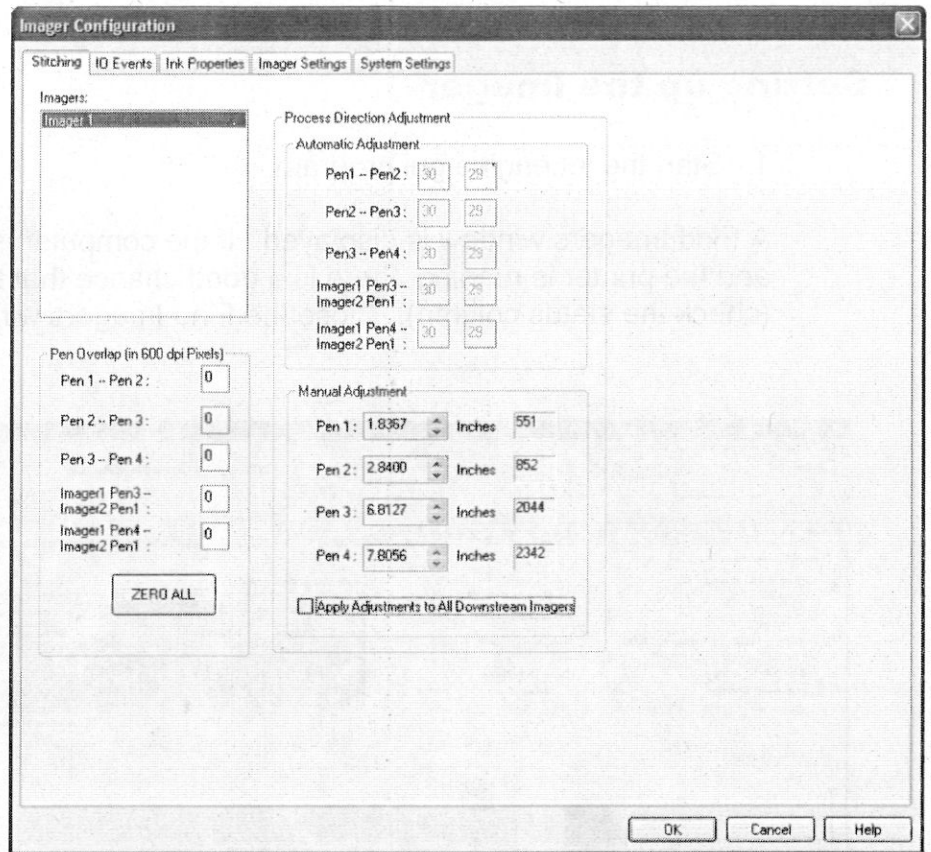
1. Start the jet.engine.gui program.

A Find Imagers window is displayed. If the computer is attached to the printer and the printer is running, there is a good chance that the imager will be found (check the status column). Close the Find Imagers window.



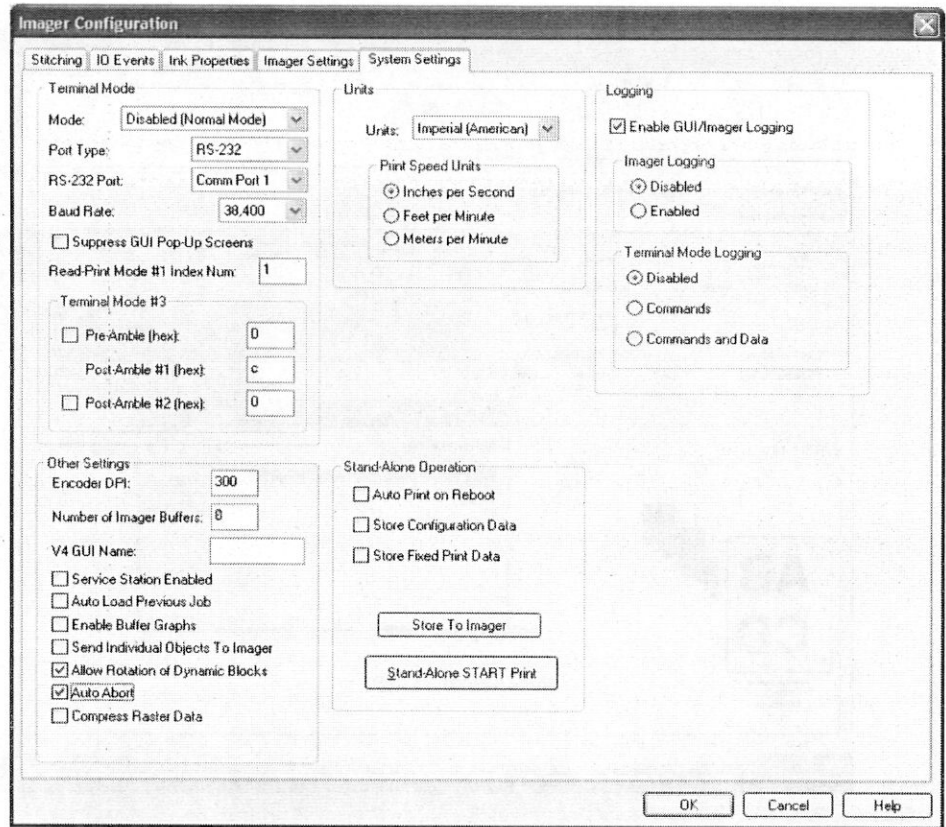
3. Make selections to the various buttons and windows so that they match the above screen.
4. If there is more than one imager listed, delete all but one by clicking on the Engine # to be deleted and then clicking Delete Engine.
5. Check the Factory Settings sheet that was supplied with the printer. On it you'll find the factory tested Distance from Sensor. Enter this number in the cell provided under the Distance from Sensor heading.
6. The printer depicted above prints at 600 x 300 dpi. Print resolution may be changed by clicking on the pull down arrows in each resolution window. Our experience is that it is best to leave the resolution alone until more experience is gained with the printer.
7. Click on the Options menu at the top of the screen and select Imager Configuration. *If the Imager Configuration option is disabled you must change the Operator Mode to Supervisor, Technician or Developer.*

6. On the Stitching tab uncheck the Apply Adjustments to All Downstream Imagers in the Manual Adjustment box if it is checked.
7. Use up and down arrows to select the correct numbers for each pen. The factory tested numbers that are loaded at set up are found on the Factory Settings sheet provided. Make sure that they agree.



8. Click on the Imager Settings tab.
9. Set all buttons and information boxes to look like the screen to the left. Double check on the Factory Settings sheet supplied.

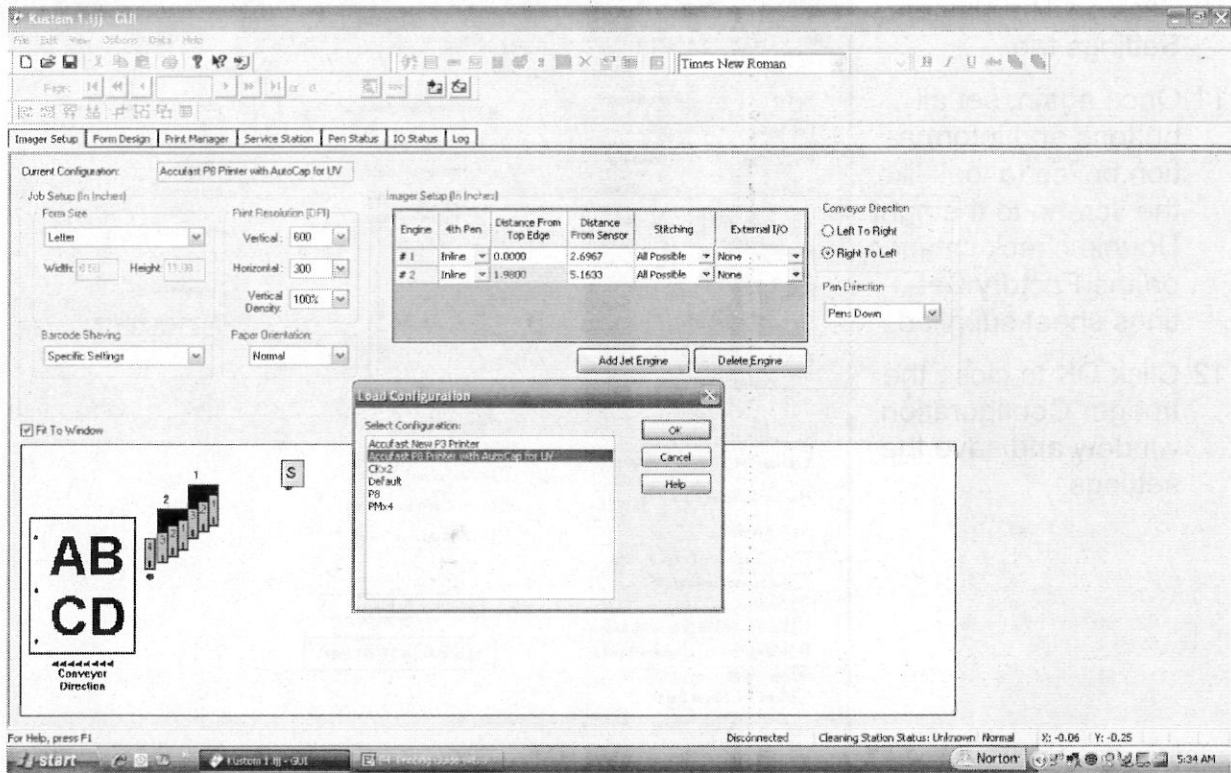
10. Click on The System Settings tab.
11. Once again, set all buttons and information boxes to look like the screen to the right. Double check settings on the Factory Settings sheet supplied.
12. Click OK to close the Imager Configuration window and save the settings.



The software is now set up to run. Proceed to load data, design a piece and print.

TIP

Protect against inadvertent changes to the system by running jobs in the Operator mode and password protecting the Supervisor, Technician and Developer modes.



Configuration Settings

By clicking File, Load Configuration you get a list of all of the configurations available for use. A configuration is a machine description that contains settings for I/O events, Pen parameters, System configurations etc. It is essentially the machine identity. If you are using special inks or have several different machines running from a single computer, you must have the correct configuration loaded.

To change a configuration, type the name that you wish to give the new set up in the configuration window then click on the File and Store Configuration buttons. The new configuration will be saved and used when the software is started next.

Loading Data

1. Start the Software and make sure that the introductory screen is correct. This usually entails selecting top for the paper orientation.
2. Click on the Print Manager tab to open an empty data screen.
3. Click on the Data menu and select Load Data.
4. Browse to and select the file that you want to print.
5. If the data is in a readable form, it will pop up in preview mode on the screen. If it isn't, you will have to change a few things to match the GUI to the data. Let's assume that the data doesn't load immediately.
6. An error message will pop up. Go back to the Data menu and select Modify Schema.
7. This is where the answers to the basic data file questions come in handy. Start on the left and supply the answer to the Record, and Field delimiter questions. Click OK.
8. If you get it right, the data file will be open in the GUI. If you get it wrong, keep trying.
9. Now you can name the fields in the data. Go back to the Data menu, and select Modify Schema.
10. Click on each field in the Field Properties box. When you select a field, you can Define it, Edit it or Delete it. Click on Edit and type in a name for the field. Continue until you have given all of the fields a relevant name. (screen below has named only one field). When finished, click OK. Your file is loaded.

Record Source Schema

Record Delimiter

Carriage Return Line Feed

Form Feed

Form Feed Carriage Return Line Feed

Line Feed

Fixed Number of Fields

Count:

No Delimiter (records are fixed in length based on fields)

Field Delimiter

Tab

Space

Carriage Return Line Feed

Line Feed

Semicolon

Comma

Quoted Comma

No Delimiter (fixed length fields)

Field Properties

Name

Field 2

Field 3

Field 4

Field 5

Field 6

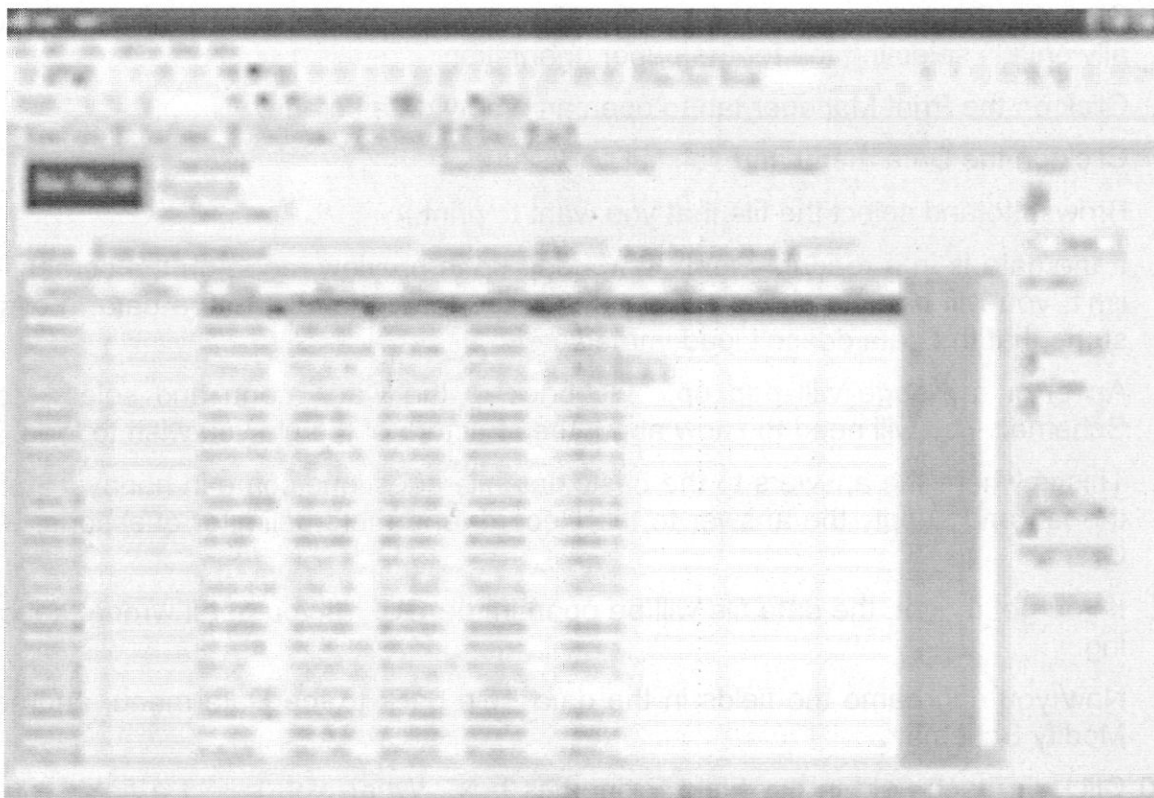
Field 7

Field 8

First Record Contains Field Names

Data Preview

	Name	Field 2	Field 3	Field 4	Field 5	Field 6	Field 7	Field 8
Record 1	B.J. Fullenk...	Berta Lumber	888 E Auror...	Macedonia ...	~ 44056-19...			
Record 2	George Law...	Arden Nursi...	818 E Auror...	Macedonia ...	~ 44056-19...			
Record 3	Sandy Boston	Beach Imperial	1003 Shosh...	Macedonia ...	~ 44056-12...			
Record 4	Vicki Kincaid	Mosquito Pa...	511 E Auror...	Macedonia ...	~ 44056-18...			
Record 5	David Derisio	Plumbing Serv	631 E Auror...	Macedonia ...	~ 44056-18...			
Record 6	Vince O'Don...	Space Age ...	414 Vernon Ln	Macedonia ...	~ 44056-18...			
Record 7	Roger Taylor	Sink Or Swl...	8125 S Far...	Macedonia ...	~ 44056-18...			



Screen as it will look when your file is loaded properly (on Print Manager tab)

Print Manager Tab

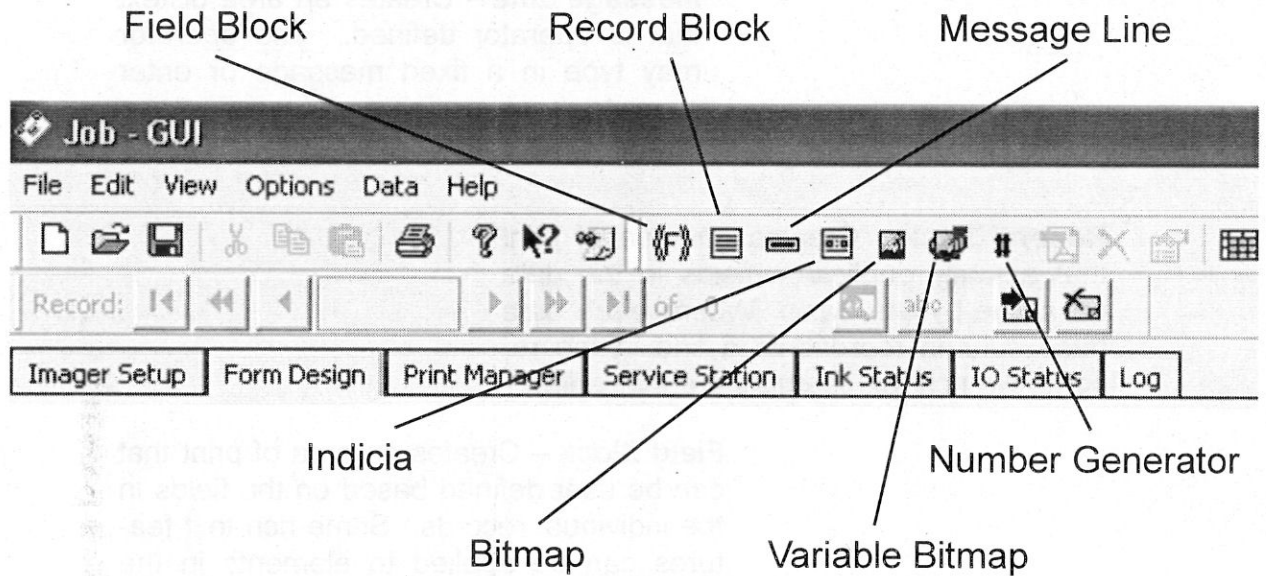
1. There is not much that you can do from this screen. Basically, you select auto scroll and watch the job run. As the Printer runs, numbers appear in the Speed, Pieces/Hour and Time Remaining boxes. The counter increments and other counts are kept. When you select auto scroll, the list advances up the screen as it prints.

If, after starting the job, the counter doesn't increment, the piece sensor is not detecting the piece. If there is no indication of speed, the encoder system is not working. Report these conditions to service if need be.

2. Selecting Stop on Error will stop printing when a bad record is detected. It is usually best to not select this option. Bad records will be highlighted in RED and can be dealt with at the end of the run. Records with errors do not print.
3. Use the Ink status box as an estimating and cost tracking tool. Make sure that the ink cost has been entered correctly in system set up and that the piece design is complete before relying on the cost calculations.
4. Trying to print faster than the resolution will allow causes the speed indicator to turn red and stop printing.

Layout Tools Overview

Each of the following tools creates a block, or area of printing. Each of these areas has similar characteristics while each has a significantly different use and purpose. To fully understand the strength and flexibility of the GUI, one must understand the use of each of these tools. To print addresses, the operator needs to understand a record block. Each icon on the Tool bar links to one of the following tools.



Layout Tools Defined

Bitmap – Creates an area dedicated to a graphic image. The most common format is bitmap (.bmp). No text is allowed in this box unless that text has been converted to a bitmap format.

Message Line – Creates an area of text that is operator defined. The operator may type in a fixed message or enter cues to have variable data messages printed in the block.

Record Block – Creates an area of print that actually duplicates fields in the data on a line-by-line basis. Where each data base column represents a line in the record. No rich text features are available.

Field Block – Creates an area of print that can be user defined based on the fields in the individual records. Some rich text features can be applied to elements in the field block.

Number Generator – Creates an area of text dedicated to a number, usually sequential. The operator can select various numbering criteria and apply it to each record printed.

Indicia – Creates an area of text that is dedicated to USPS postage payment indicia. The operator may change text attributes and indicia formats, but can not insert data from the data base.

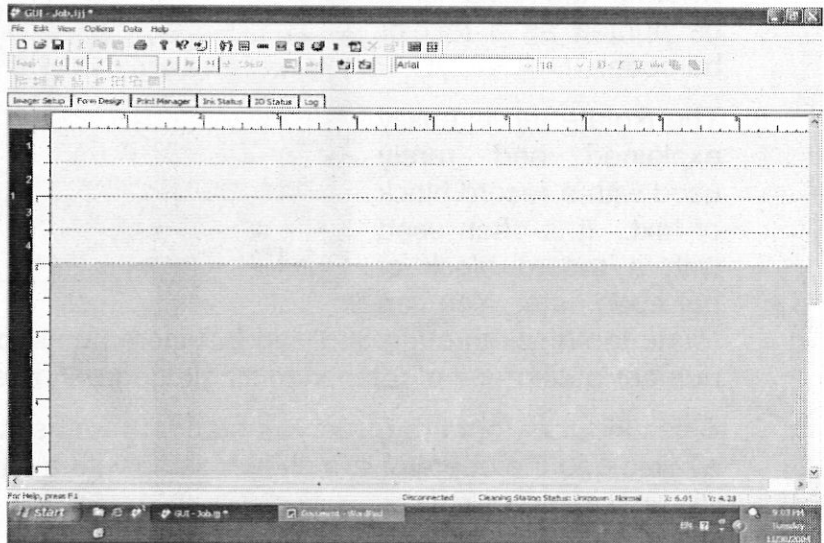
Variable Bitmap – Creates an area that contains a graphic that is specific to the addressee. The operator can set up graphic selection criteria and different graphics will be printed with different addressees.

Mail Piece Layout

Let's review. The machine is hooked up and running, the data base is loaded and the job is open. All that remains is to tell the printer what to print where. This section will give you the basics of mail piece design and layout. You'll be able to perform entry level printing tasks that will satisfy a customer's needs. After the skills outlined in this section are mastered, we can get into some of the more intricate design features and capability.

Blank Form Design Screen

1. Click on the Form Design tab. An empty design screen comes up. If it doesn't, you may not have selected the top of the paper in the initial Imager Setup screen.
2. In the left margin, from top to bottom, are the imagers and pens. Check to be sure that this agrees with the actual number of imagers in the machine.
3. The ruler across the center of the screen represents the width of the form selected. If this isn't correct, return to the Imager Setup screen and select the proper size for the form. In the example above, we have 4.5 inches of print across an 8.5 inch wide (letter) sheet.
4. There is a Tool Bar across the top of the screen (font selection is in this bar). The icons in the center section are the most commonly used form design tools. See the Layout Tools sections for a summary of the icons and their use.
5. Click on the Record Block icon. An area of text equal to a 1.5 x 1.5 inch square block is opened in which as many as nine lines are displayed. This block opens under the assumption that three pens are being used to print as many as three lines of data per pen. In the case below, the Record Block has been dragged and dropped to a location 4 inches from the left of the paper on imager 2. When you click on a block, you make it active so that you can work on it. Active blocks are known by the square grab handles around the perimeter of the block and by the dark blue registration line on both margin rulers.
6. To manipulate the Record Block, either double click on it, or right click on it to open the Properties window and select properties.

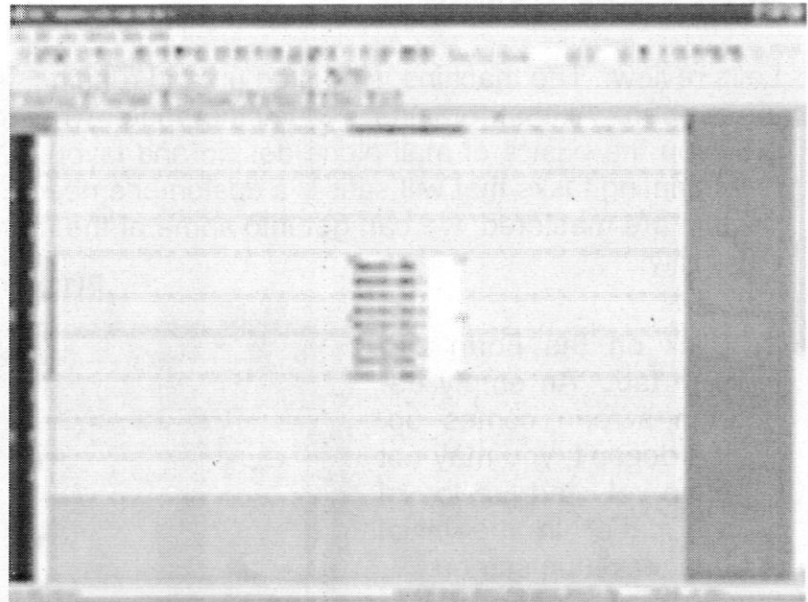


Form Design Screen with Record Block

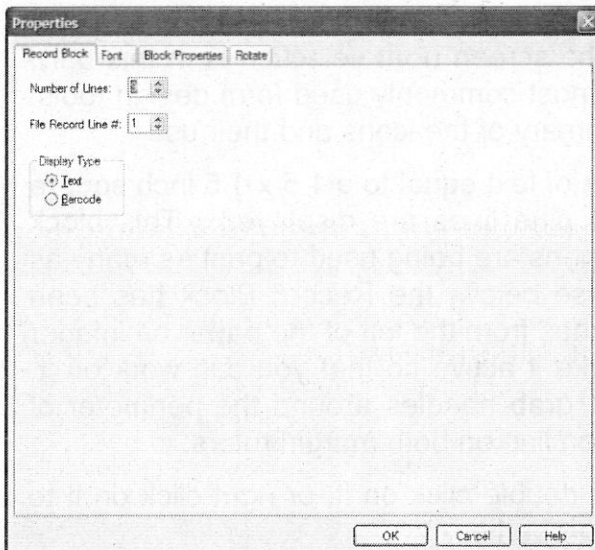
7. Record Block Properties are simple. Choose the number of lines, starting with a particular line. Recall that each line is a field, or column in the database. Identify whether the data is to be printed as a text or barcode.

8. The Rotate tab is easily explained and rarely used with a record block of text. It is often used with a record block of bar code data. You can rotate the block through 360°s in 90° increments, or select custom and enter the number of degrees of rotation in single degree increments.

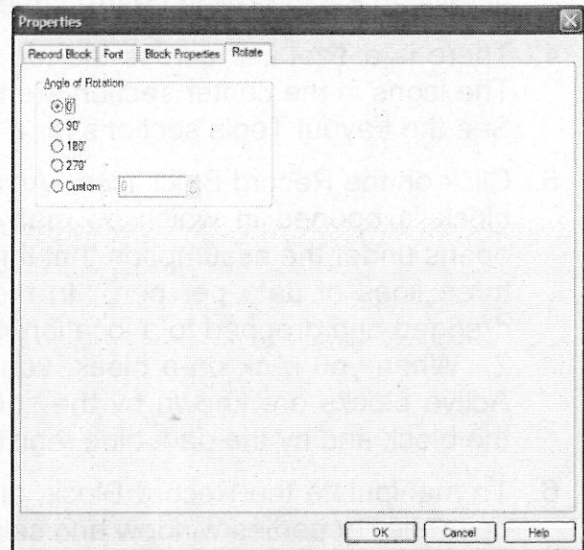
9. Selecting the Font tab gives you standard font style selections in which all fonts available to the operator are shown along with a sample of the font as it will print.



Record Block Properties Screen



Rotate Tab



Block Properties

The Block Properties tab is quite common to all blocks and needs to be explained in detail.

Word Wrap - this is a default selection that causes trouble in addresses. It is often better to cut off part of a name than to have it wrap into the next line down.

Transparent - Each block is rectangular. This rectangular block takes up space on the piece equivalent to its dimensions, but data is often not in the full rectangular space. In other words there is non-printing space assigned to the block in which another block can not print. Making the block transparent will delete the white space around a block. It shows up on the screen without this white space.

Position is Locked - Self explanatory. Enter the dimensions from the left edge and top of form in the space provided, and the record block will stay right there. The only way to move it is to change the actual measurements from the edges of the form.

Resize text when Box Size changes - This allows you to stretch the box and make the text larger inside it.

Generate Error If text Exceeds Borders - This will either cause the machine to stop printing if the text is too big for its box or it will keep the record from printing. In addressing applications, it is best to leave this one unchecked and to make boxes long enough for the records.

Rectangle Type and Pen Width - This puts a line around the box. The higher the pen width, the thicker the line.

Note: The vertical line of selection boxes must be checked prior to printing to be sure that the correct settings are made.

Block Properties tab

The screenshot shows a dialog box titled "Properties" with a close button in the top right corner. It has four tabs: "Record Block", "Font", "Block Properties", and "Rotate". The "Block Properties" tab is selected. The dialog is divided into several sections:

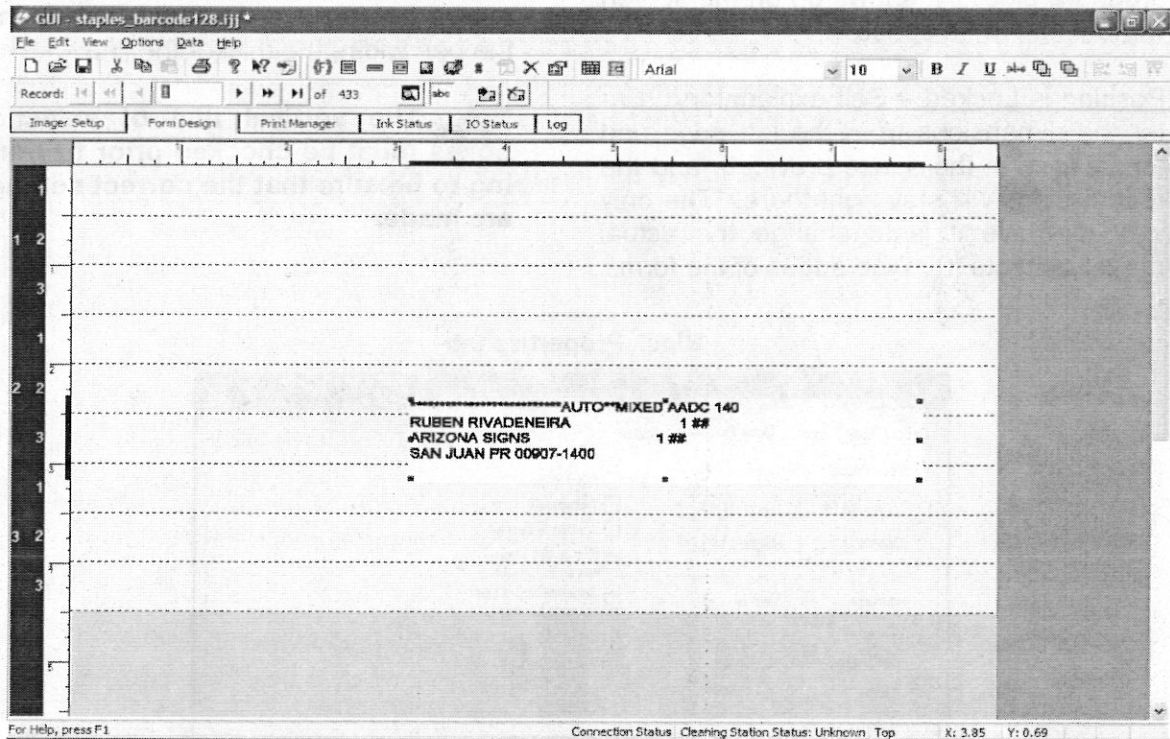
- Block Position (In Inches):** Four input fields: Left (4.04), Top (1.48), Width (1.5), and Height (1.54).
- Horizontal:** Three radio buttons: Left (selected), Center, and Right.
- Vertical:** Three radio buttons: Top (selected), Center, and Bottom.
- Checkboxes:** Word Wrap, Transparent, Position is Locked, Resize text when box size changes, and Generate error if text exceeds borders.
- Rectangle Type:** A dropdown menu currently set to "No Rectangle".
- Pen Width:** A dropdown menu currently set to "1".
- Casing:** Three radio buttons: None (selected), ALL CAPS, and Upper/Lower Case(string replacement).

At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help".

Using Record Blocks

The GUI is equipped with viewing tools. On the Tool bar we find an icon marked abc. Clicking on this icon previews the data that will be printed. Using the VCR controls lets you move through the data base from start, to end, and back. Click the icon again to return to the default Record Block view.

This record block represents the first record to be printed. It consists of 4 lines of data printing in Arial 10 point font. The left edge is about three inches and the block is approximately 5 inches long. The block is not transparent and space has been left to allow for longer addresses and endorsement lines to be printed. The record is printing on the second and third pens of Imager #2.



Printing PostNet Bar Code

There are a number of steps to go through. Start by recognizing that a record block can not mix text and bar code data. It is one or the other. Thus, to print a bar code in a Record Block, that block must be assigned exclusively to the bar code data field in the record.

1. Click on the Form Design tab, then select the Record Block icon. Double click on the Record Block to get the Properties Screen seen here.
2. Enter 1 for the number of lines. Enter the line column number from the database where the barcode information is found. In this case 5.
3. Select Barcode for the Display Type. A Barcode Properties tab will appear in the Properties window.
4. Click on the Barcode Properties tab.

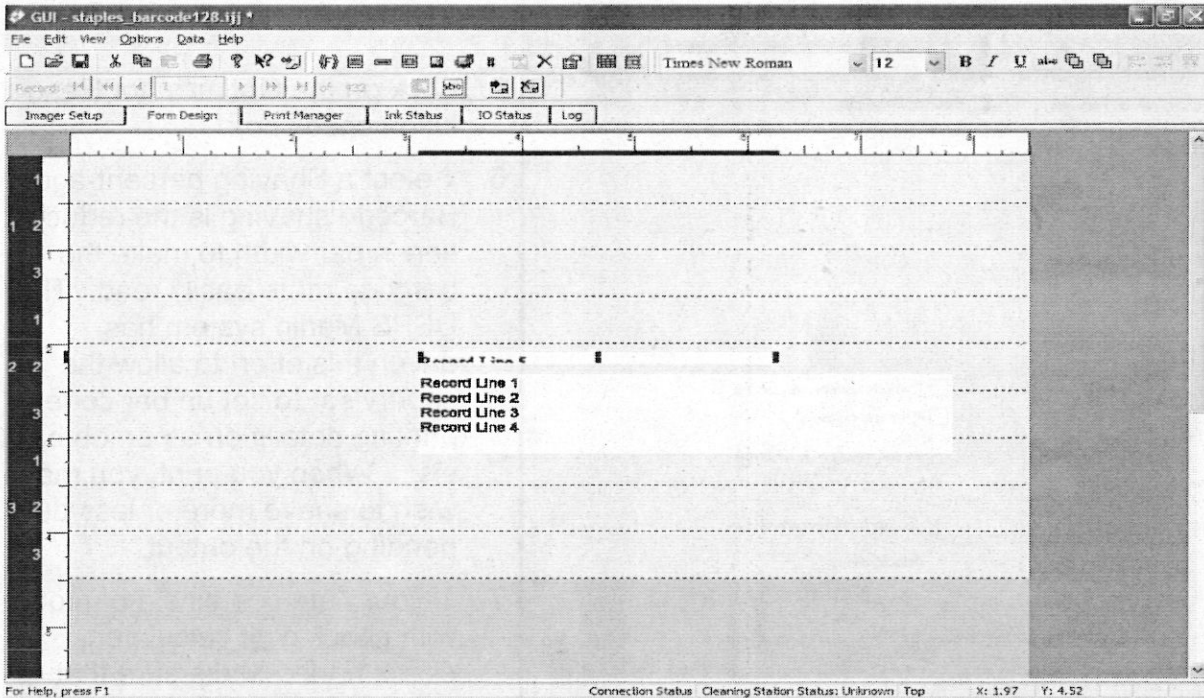
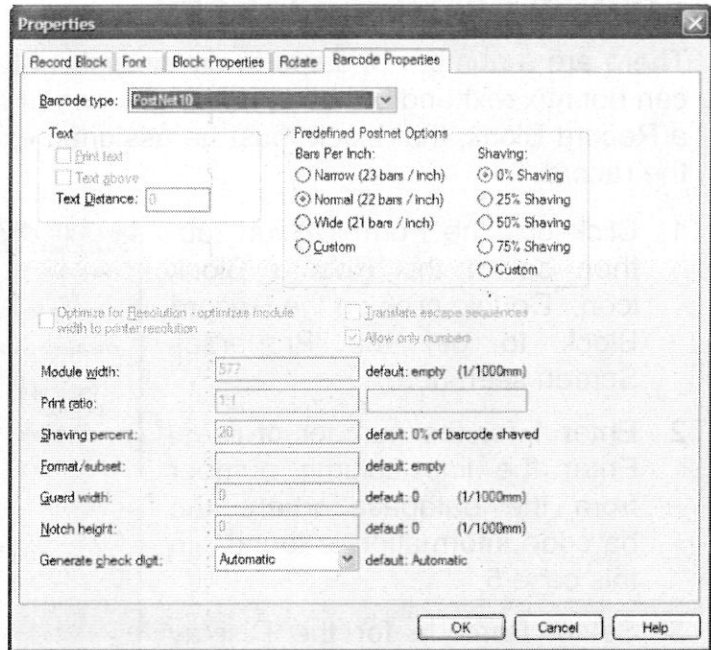
Properties Screen

The screenshot shows the 'Properties' dialog box with the 'Barcode Properties' tab selected. The 'Number of Lines' is set to 1 and 'File Record Line #' is set to 5. Under 'Display Type', 'Barcode' is selected with a radio button. The 'OK', 'Cancel', and 'Help' buttons are visible at the bottom.

The screenshot shows the 'Properties' dialog box with the 'Barcode Properties' tab selected. The 'Barcode type' is set to 'None'. Under 'Text', there are checkboxes for 'Print text' and 'Text above', and a 'Text distance' field set to 0. The 'Optimize for Resolution' checkbox is checked. The 'Shaving percent' is set to 20. The 'Generate check digit' is set to 'None'. The 'OK', 'Cancel', and 'Help' buttons are visible at the bottom.

5. Click on the Optimize for Resolution check box.
6. Select a Shaving percent-age. Barcode shaving is the reduction in bar width to make the barcode more easily read. The USPS Merlin system has driven this effort to allow the supervisor to set up bar code printing details on a per job basis. When you print, you may wish to shave more or less depending on the output.
7. If your data contains a barcode with check digit calculated, check none. Make sure that your choice here is consistent with the data.

8. Select the type of barcode being printed in the Barcode Type drop-down box.
9. Choosing a PostNet bar code will open the Postnet options box. Again, Merlin is at work. Issues of bar spacing and shaving are revisited. If the bars are already being shaved, select 0. To widen or narrow bar spacing, make the appropriate selection. Custom isn't much of an option as the range is only from 21 – 23 bars per inch.
10. Click OK to return to the Form Design layout screen.

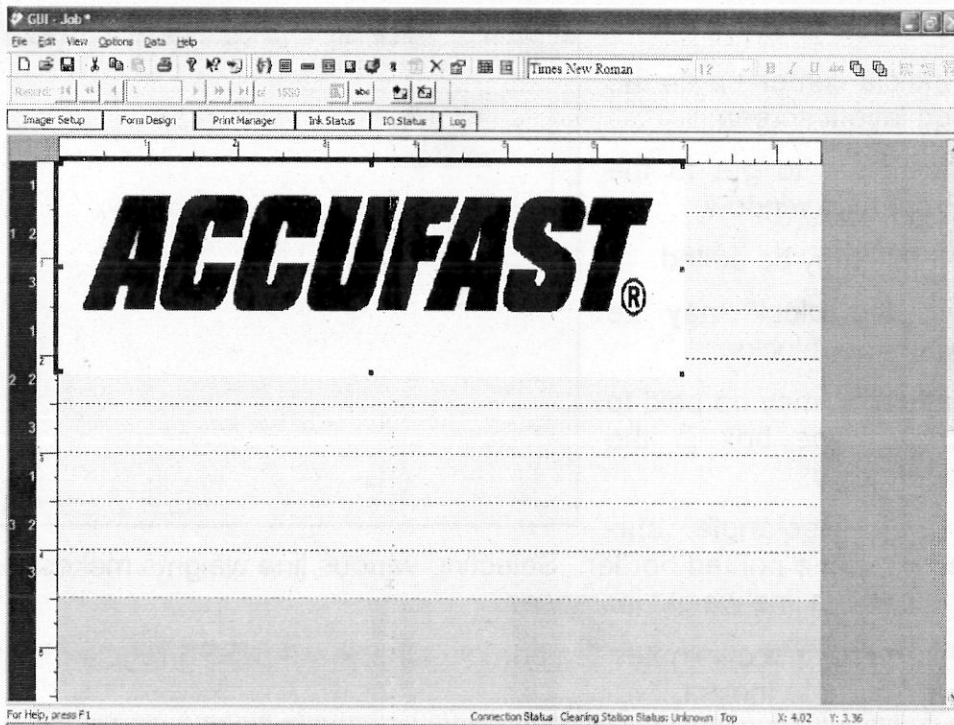
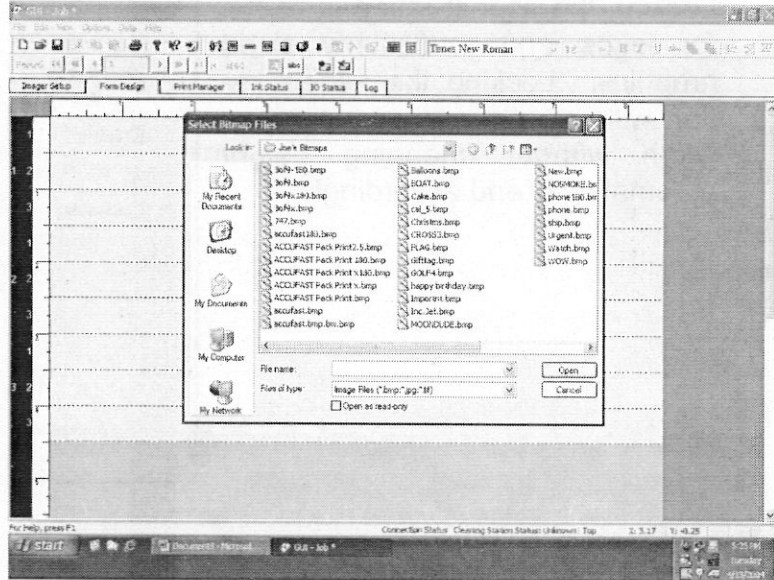


POSTNET Barcode as a Record Block above Address

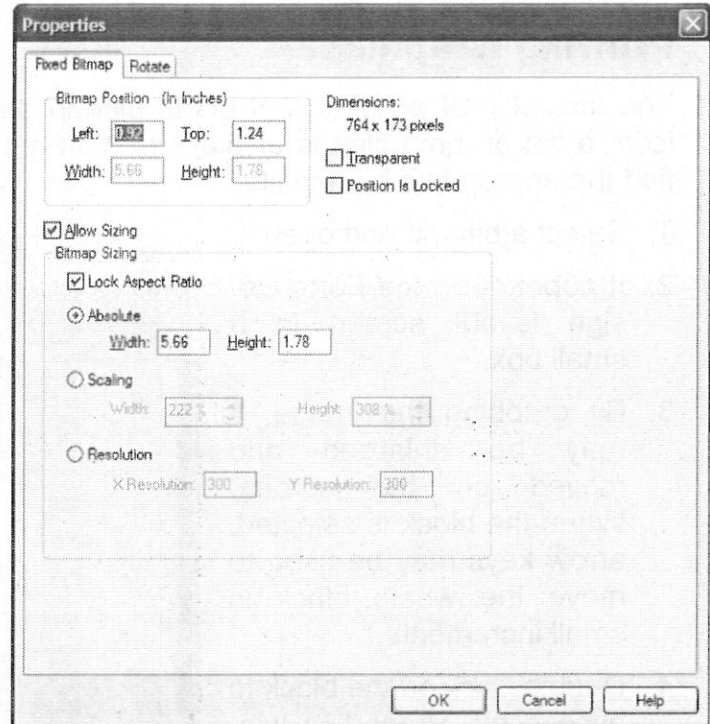
Printing Graphics

The Inc.Jet GUI accepts and prints bitmap graphics. When you select the Bitmap icon, a list of .bmp files is displayed. You may use standard Windows searches to find the appropriate bitmap file.

1. Select a bitmap and open it.
2. It appears on the Form Design layout screen in a small box.
3. By grabbing the image, it may be enlarged and moved on the screen. When the block is selected, arrow keys may be used to move the whole block in small increments.
4. Double Click on the block to access the Properties window. Bitmap properties are limited to Fixed Bitmap information and rotation.



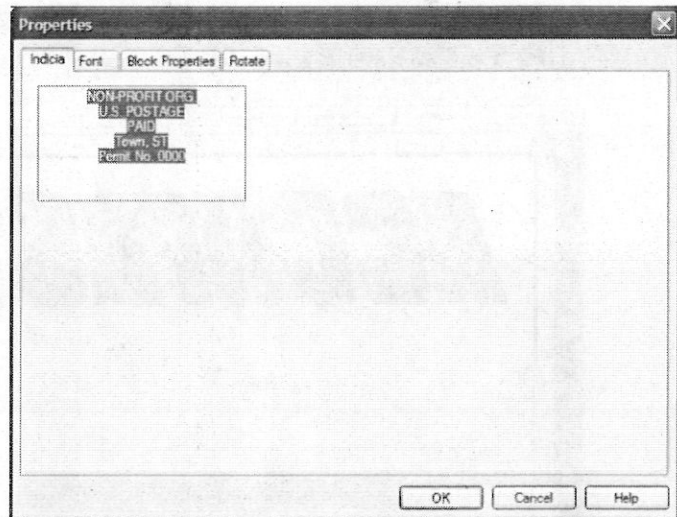
- The controls are apparent. You can fix a bitmap in its location and lock its size to specific specifications. Usually, bitmaps are dragged and dropped and sized by eye during the design process. Locking the aspect ratio is useful for logos and particularly sized graphics. Locking the aspect ratio will not allow you to increase width without changing height automatically and accordingly.



Printing Indicia

The Indicia tab is dedicated to mailing applications. The Inc.Jet GUI is set up to automatically print a postal indicia by using this tool.

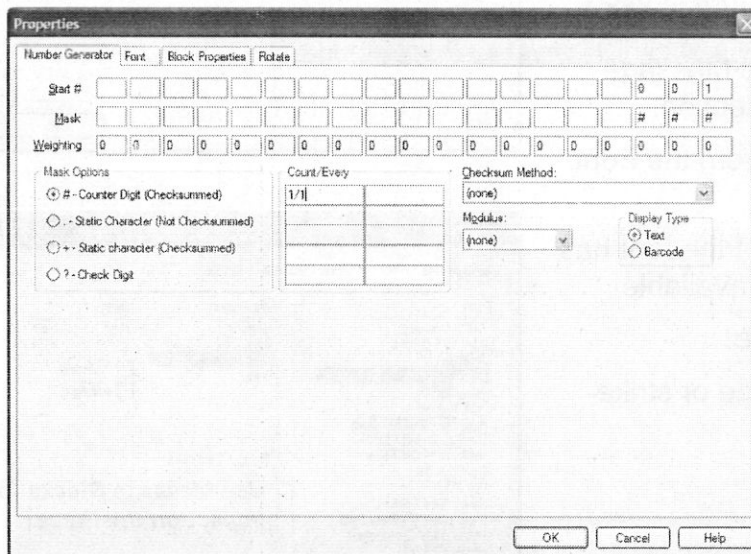
- Click on the Indicia icon.
- A dummy Indicia comes up on the Form Design layout screen.
- Double Click on it to get to the standard Properties window
- High lighted text may be edited.
- Changes to the block may be made as with other blocks.
- Particular attention may be paid to the Rectangle Type box in the Block Properties tab.
- Selecting Full Rectangle surrounds the text with a printed border. Selecting various line weights makes that border darker as the line weight increases.
- Selecting No Rectangle eliminates the border. Check with USPS regulations to create the appropriate Indicia.



Number Generator

The Number Generator is a potent tool. The GUI will print consecutive numbers in any of a variety of ways. Click on the Number Generator icon and double click the box to open the Properties window.

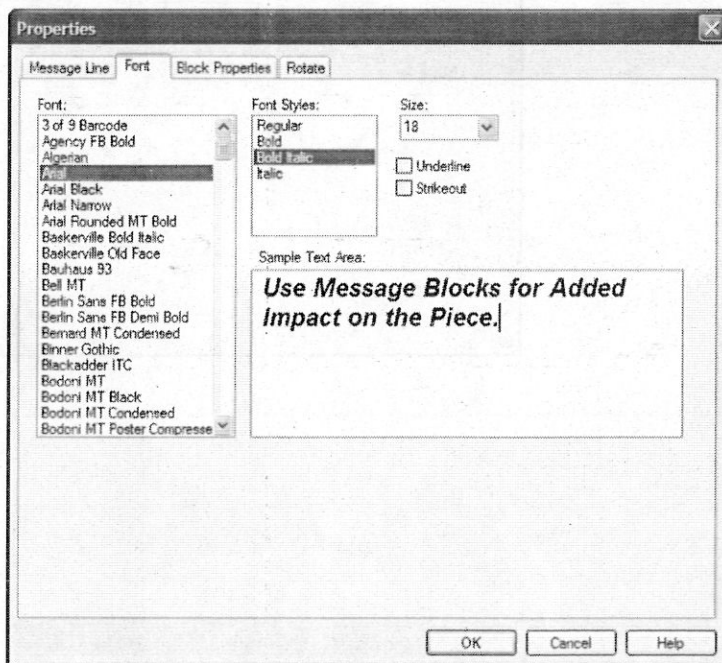
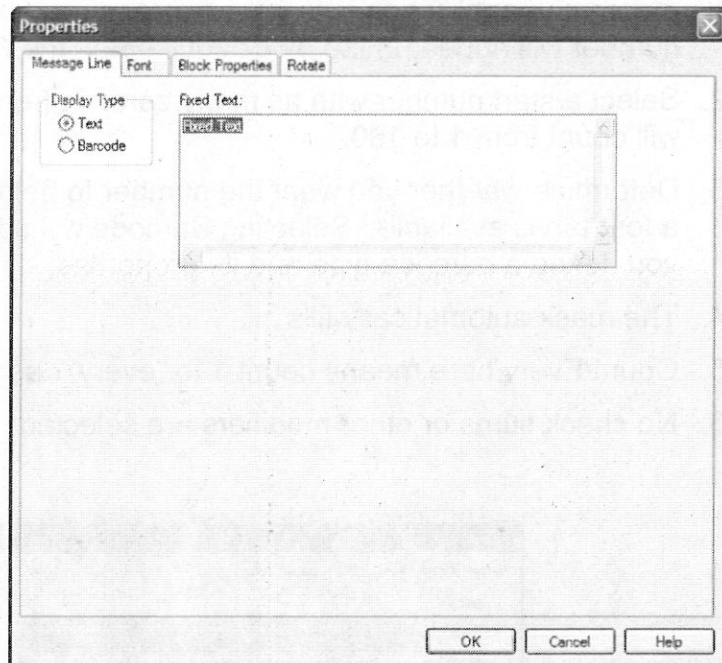
1. A common application is to print consecutive numbers on each item printed. The number will appear in the block outlined on the Form Design layout screen.
2. Select a start number with as many zeros in front of it as you will need. Here we will count from 1 to 100.
3. Determine whether you want the number to be text or barcode. If text is selected, a font tab is available. Selecting Barcode will add a barcode properties tab where you define a barcode type and its properties.
4. The mask automatically fills in.
5. Count/Every here means count 1 for every 1 as we're counting singly up to 100.
6. No check sums or other modifiers are selected.



Using Message Lines

The Message line tool is used to print fixed text over and over again. For an explanation of the Block Properties and Rotate Tab, see Record Blocks.

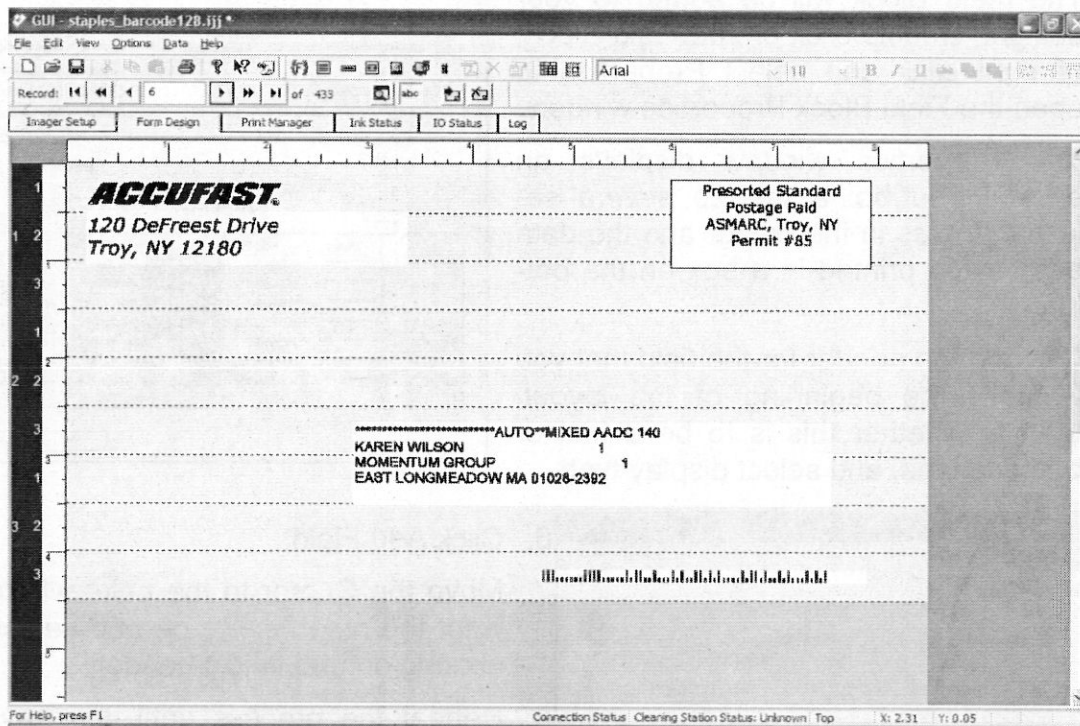
1. Click On the Message Line icon on the Tool bar.
2. A block appears on the Form Design layout screen.
3. Double Click the block to bring up the Properties screen (right).
4. Replace the words "Fixed Text" with your message.
5. This Properties screen is the same one that is used for other blocks. An important item in the Message Line is font selection.
6. Select a font from the Font list.
7. Select a style if the font has various styles available
8. Pick a font size.
9. Check underline or strikeout.



Mail Piece Layout Review

We have the four line address with a bar code on lower right. Both are record blocks.

- ACCUFast is a Bitmap graphic in a transparent block.
- The return address is a Message Line fixed message printing on all pieces.
- The indicia is an Indicia block with a full, narrow rectangle applied.
- We are previewing address number 6 of 433 (field block).
- The appropriate bar code is being printed in the lower right corner of the piece as a record.

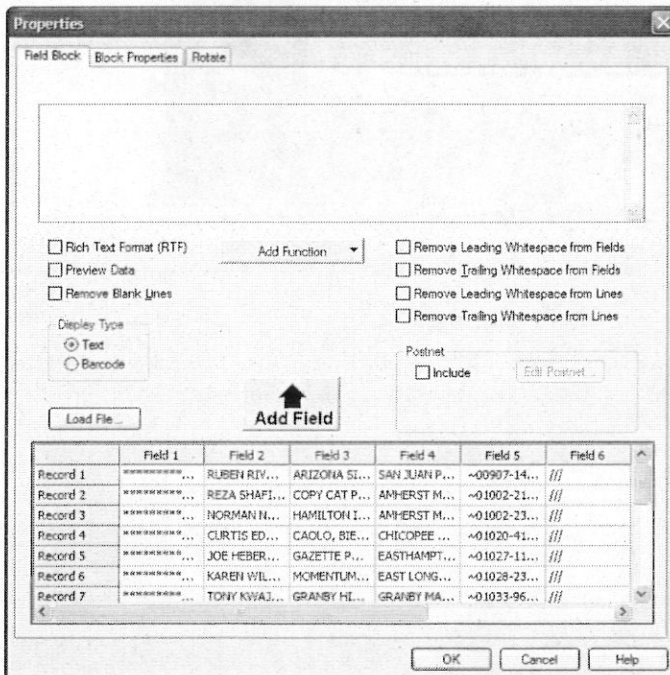
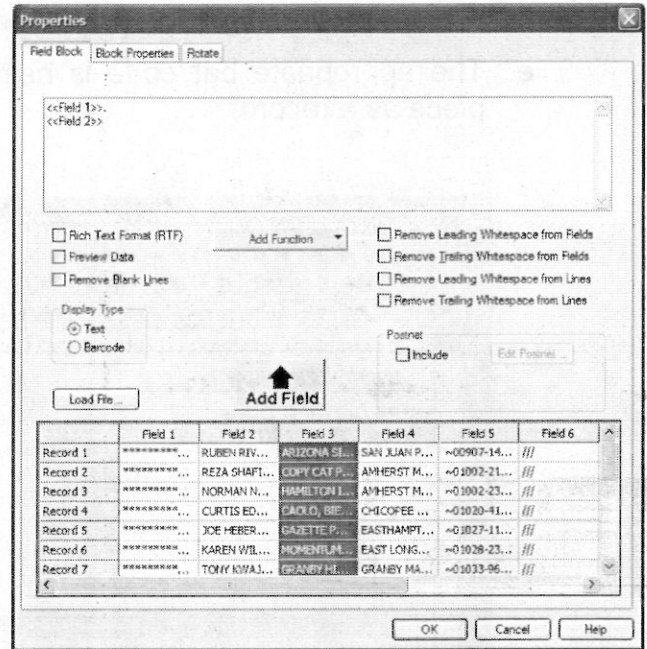


Using Field Blocks

The Field Block is used when data is organized by fields, not lines. Typically, mail processing software has a similar step in which the user creates a "label layout". In this step, data is placed by field into a line-by-line layout. The layout is built step by step, field by field until the finished "label" is inspected and stored.

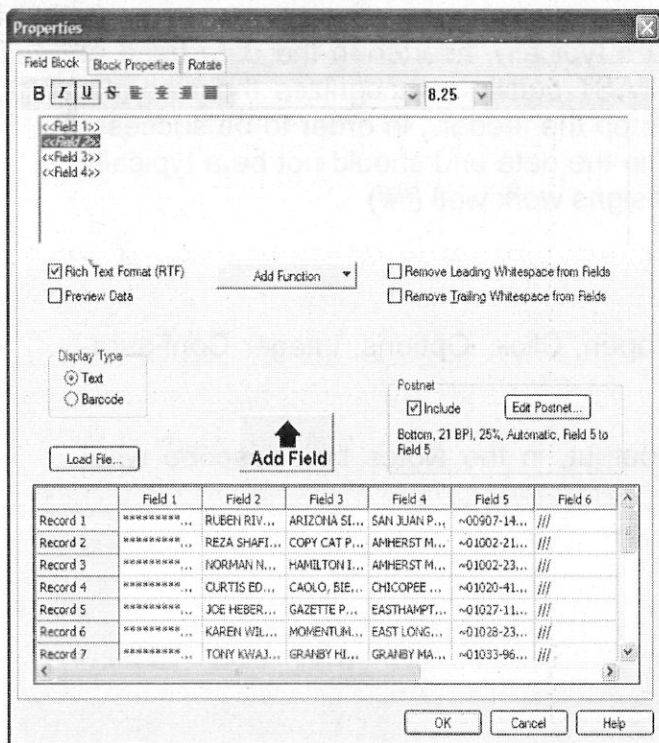
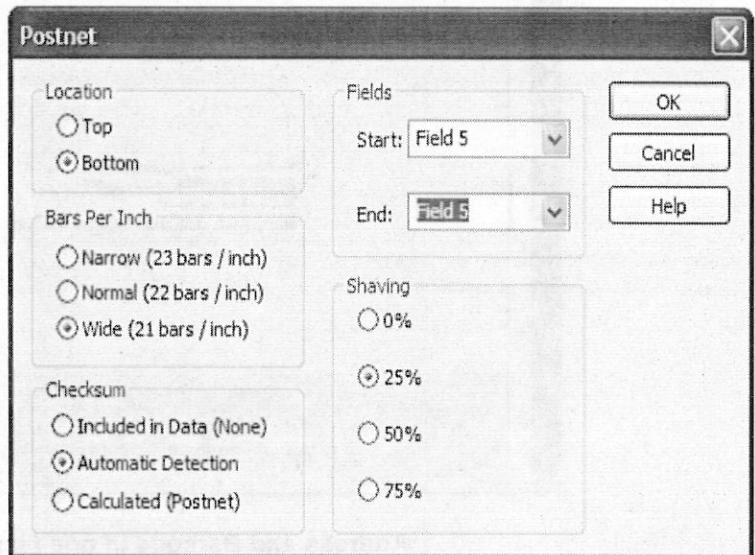
Field blocks have an additional advantage in that a few Rich Text features (Bold, Underline, Italic, etc) may be applied on a per field basis.

1. Load, or check to be sure that a data base is loaded.
2. Go to the Form Design tab and click the Field Block icon.
3. The Field Block will be added to your design. Double click on the Field Block, or right click and select Properties to open the Field Block Properties window.
4. The Properties window displays an empty layout box at the top, several selection boxes in the center and the data base to be printed in a box on the bottom.
5. Click on the header for the field that you want at the beginning of the layout. Identify whether this is to be a text or barcode label and select display type.



6. Click Add Field.
7. Move the Cursor to the point where you want the next field to be and select it by clicking on that field's header.
8. Repeat the process until you have finished.
9. To add a PostNet barcode to a typical mailing label, click Include in the Postnet box.
10. The Edit Barcode button will become active when the include box is checked in the Postnet box.

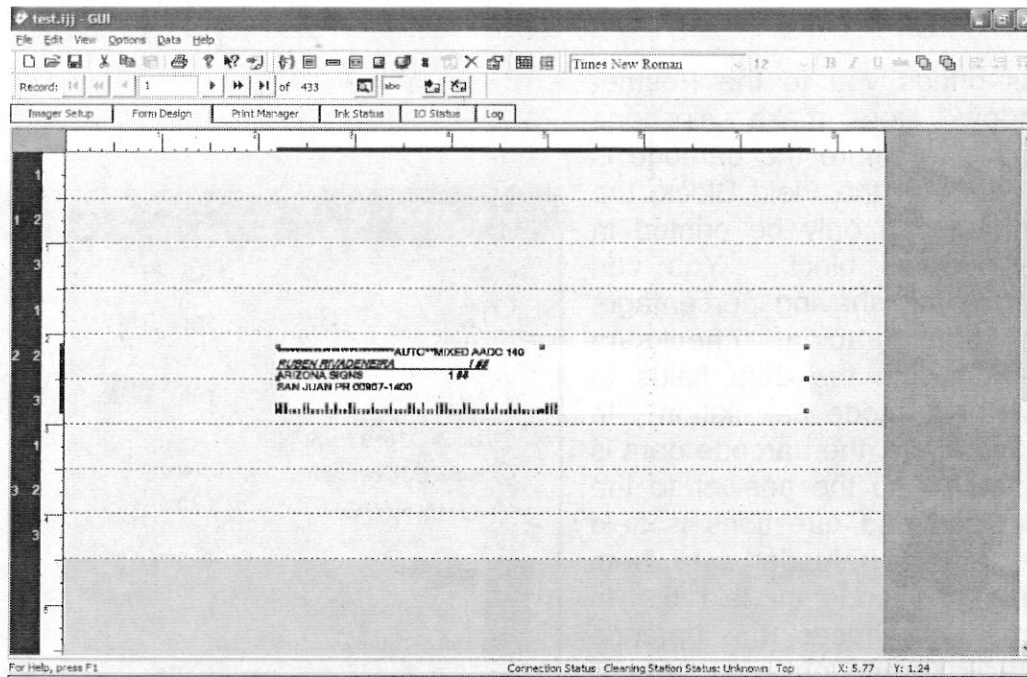
11. This brings you to the Postnet window. Here, make selections relative to where the barcode is to print. In the Field Block, the barcode can only be printed in the address block. You can choose the shaving percentage, the bar spacing, checksum method, and the data fields to use for barcode calculation. In our example, the barcode data is in field 5, so the answer to the start and end questions is field five. The barcode data both starts and ends in field five. In some data bases, the barcode data is spread out over several fields. When that happens, answer with the beginning and end of the barcode. Note: the barcode data must be in consecutive fields.



12. Click on the Preview Data check box, and that is what you'll see. Data only, no barcode.

13. To use the Rich Text features, click on the Rich Text Format (RTF) check box, select the field in the data to which you wish to apply the feature and select the feature. Here, we've chosen underline and italics applied to Field 2, the addressee. When satisfied, click OK.

14. Return to the Form Design tab and select the preview mode to view exactly what will be printing on the piece.



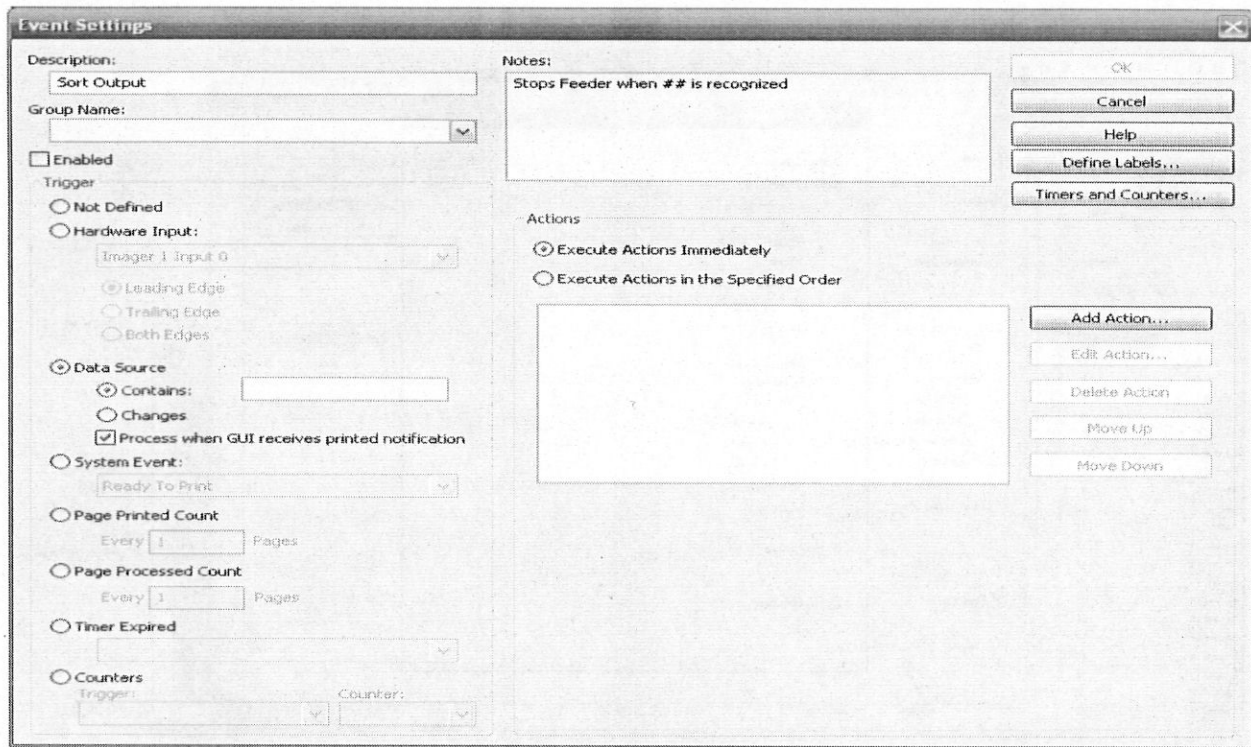
Address and Barcode in one Field Block with underline and italics applied to Name

Sort Breaks

Sort Breaks are non-printing characters that are typically inserted in the data base at the proper place to facilitate mailing. ACCUFAST software recognizes these marks and can send a signal out from the imager to stop the feeder. In order to be successful, the sort mark should be in a separate field in the data and should not be a typically used character in addressing. Double number signs work well (##)

Start by:

1. With the Operating Software (GUI) open, Click Options, Imager Configuration, I/O Events.
2. Click NEW
3. In the Event name box, type sort output, in the Notes box describe what you're doing.
4. Click the Enabled box
5. Select Data Source

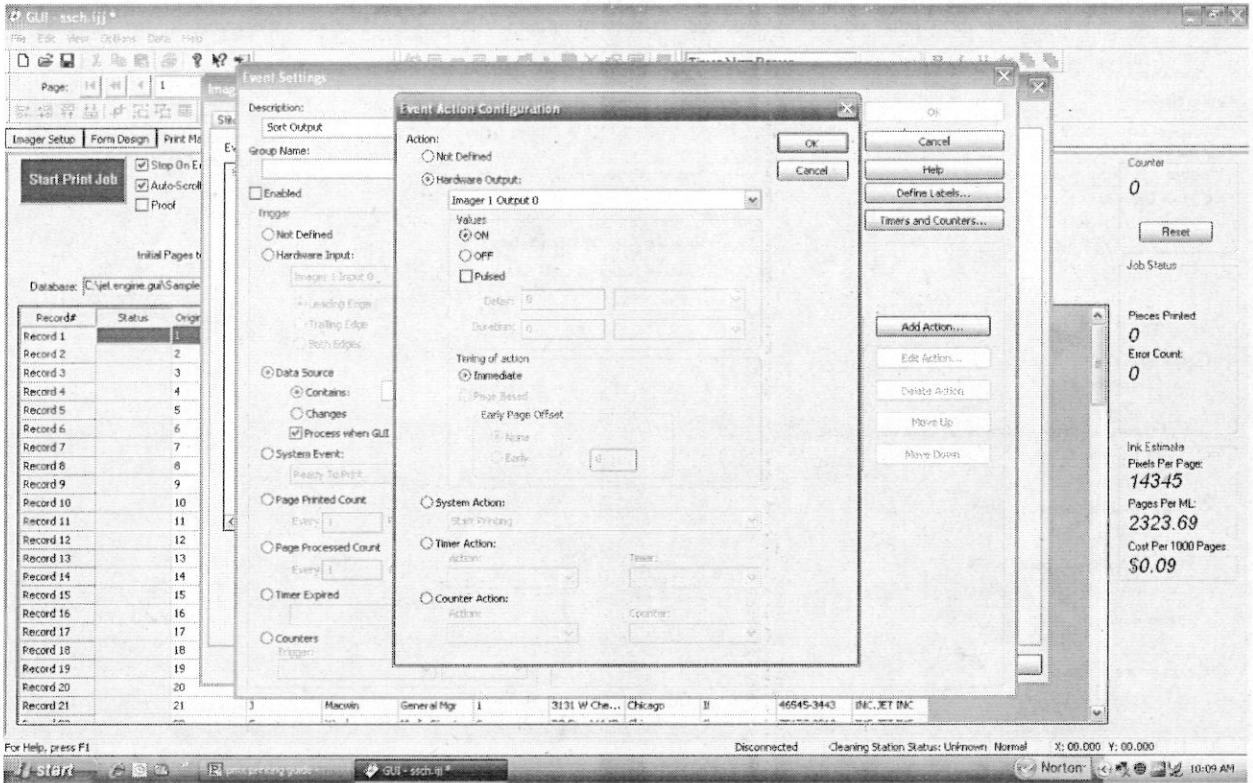


You have a choice here. Typically, if you have a short printer or are running it slowly, an immediate stop is in order. If, on the other hand, you are using a longer bed and the feeder is further away from the imager, there will be pieces in cue and you need to recognize the sort break a bit sooner and stop so that the correct piece ends up last.

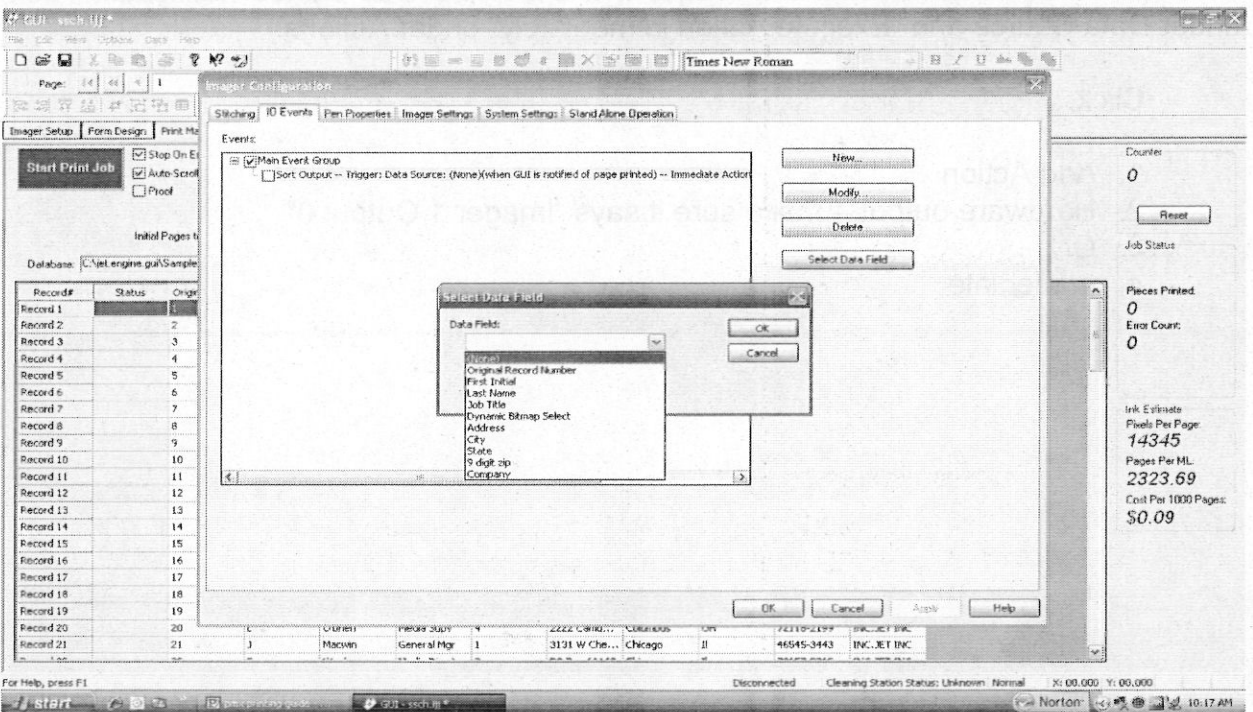
To stop immediately, check the “Process when GUI receives printed notification” box under Data Source and “Execute Action immediately” under Actions.

Click:

1. Add Action
2. Hardware output - make sure it says “Imager 1 Output 0”
3. ON
4. Immediate



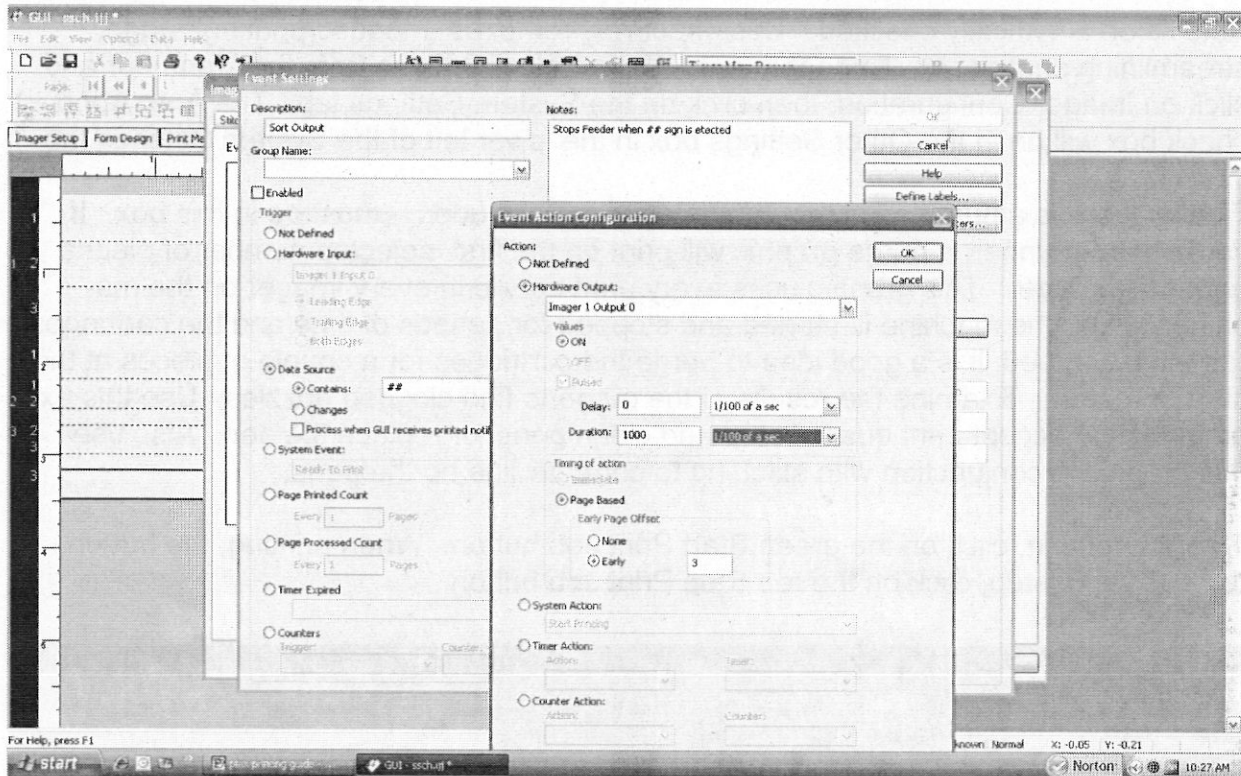
Click OK and OK again to move back to the original I/O screen. You have specified the mark, its general source and the action that you want to take. All that is left is to specify the field in the data base where the mark will occur.



Double Click the Sort Output Event that you just created. This opens up the select data field box., Click on that box. Follow instructions to select a field in which the data occurs.

This step is vital. If there is an error, the event will not be entered or useful.

To activate the Sort event click the enabled box on the I/O screen. To de-activate, remove the check from that box.



To Begin Printing

1. Check that the printer is ready and an envelope layout is complete.
2. Click on the Start Print Job button on the Print Manager tab.
3. Notice that the speed of the belt is being continually monitored. This speed must be within the data processing capacity of the system or the speed number will turn red and printing will stop. Variable speed printers must be set by the operators to run in the black. The determining factor is print resolution. Use the following speed chart as a guideline.

150 dpi	90 ips.
300 dpi	47 ips
600 dpi	22 ips

4. To stop printing, stop the feeder and transport belt, then click on the Stop Print button.

There are a few decisions to be made relative to print management. First, do you wish to stop printing when a record with an error comes up for printing? In the example below, record 15 is too short, putting important bar code information in the wrong cell. If the data base is full of these records, stopping on each is probably ill advised. Typically, this box is left unchecked. Flawed records are skipped and accumulated at the end of the run for examination.

Auto Abort is typically checked. This effectively removes a "pause printing" stage, streamlining shut down. To enable Auto Abort, select Options from the Menu bar and click on Imager Configuration, then click on the System Settings tab. The Auto Abort check box will be in the Other Settings box in the lower left of the System Settings tab.

Finally, there is a purge selection. An integer — 0 included — must be in this box. If you enter a number, a purge graphic will print on the first selected number of pieces under the imager. This graphic uses every print nozzle in every imager on the machine. When the machine is started and stopped for periods of time and the cartridges remain uncapped, it is a good idea to purge the cartridges for a couple of pieces at the start of the run. Examine the results of the purge to find clogged nozzles. Use this examination to accept print quality, stop and clean pens, or replace the pen. Also use this graphic in conjunction with stitching to correctly line up the pens.

To start printing, click on the green Start Print Job button. When printing, the button turns red. To stop, click on the red Stop Print Job button.

The screenshot shows the 'GUI - Job' software interface. At the top, there is a menu bar (File, Edit, View, Options, Data, Help) and a toolbar. Below the toolbar, there are tabs for 'Imager Setup', 'Form Design', 'Print Manager', 'Ink Status', 'ID Status', and 'Log'. The 'Print Manager' tab is active, showing a 'Start Print Job' button and a 'Stop On Error' checkbox (checked). The 'Auto-Scroll' checkbox is also checked. The 'Initial Pages to Purge' is set to 0. The 'Database' is 'C:\Joe's Bitmaps\Chicago3.txt', with 1,549 records and 0 records queued. The 'Counter' is 0. The 'Job Status' section shows 'Pieces Printed: 0' and 'Error Count: 0'. The 'Ink Status' section shows 'Pixels Per Page: 0' and 'Pages To Empty: 0'. The 'Time To Empty' is also 0. The main area is a table with 8 columns: Record#, Status, Name, Field 2, Field 3, Field 4, Field 5, Field 6, Field 7, and Field 8. Record 15 is highlighted, showing a bar code in the wrong field. At the bottom, there is a status bar with 'For Help, press F1' and 'Connection Status: Clearing Station Status: Unknown Orientation: X: 00.000 Y: 00.000'.

Record#	Status	Name	Field 2	Field 3	Field 4	Field 5	Field 6	Field 7	Field 8
Record 1		B.J. Fuller...	Berta Lumber	888 E Auror...	Macedonia ...	~ 44056-19...			
Record 2		George Law...	Arden Nursi...	818 E Auror...	Macedonia ...	~ 44056-19...			
Record 3		Sandy Boston	Beach Imperial	1003 Shosh...	Macedonia ...	~ 44056-12...			
Record 4		Yicki Kincaid	Mosquito Pa...	511 E Auror...	Macedonia ...	~ 44056-1803 13 ~			
Record 5		David Deriso	Plumbing Serv	631 E Auror...	Macedonia ...	~ 44056-18...			
Record 6		Vince O'Don...	Space Age ...	414 Vernon Ln	Macedonia ...	~ 44056-18...			
Record 7		Roger Taylor	Sink Or Swil...	8125 S Far...	Macedonia ...	~ 44056-18...			
Record 8		Barbara Pierce	Sageacious Inn	8371 Fairlan...	Macedonia ...	~ 44056-18...			
Record 9		Sabina Knorr	Farrn & Swa...	8277 Water...	Macedonia ...	~ 44056-18...			
Record 10		Joanne Belger	Casa Linda ...	8368 Water...	Macedonia ...	~ 44056-18...			
Record 11		Sai Stabile	Hazen & Sa...	448 James Ln	Macedonia ...	~ 44056-18...			
Record 12		Jim Smith	Admiral Buil...	8981 Chero...	Macedonia ...	~ 44056-12...			
Record 13		Wes Farring...	Barge & Shi...	9070 Semin...	Macedonia ...	~ 44056-12...			
Record 14		George Leman	Foster Trill...	9197 Blackh...	Macedonia ...	~ 44056-12...			
Record 15		Bob Susann	788 Iroquo...	Macedonia ...	~ 44056-12...				
Record 16		Tom Becker...	Harrys Har...	681 Iroquo...	Macedonia ...	~ 44056-12...			
Record 17		Jim Laprade	Micro Accurate	9096 Chero...	Macedonia ...	~ 44056-12...			
Record 18		Bill Scott	Charlotte Apts	960 Navajo Trl	Macedonia ...	~ 44056-12...			
Record 19		Lovan Thomas	754 Navajo Trl	Macedonia ...	~ 44056-12...				
Record 20		Roxanne Dillon	South Baldm...	839 Comanc...	Macedonia ...	~ 44056-12...			
Record 21		W. Wong	Kloch McLau...	811 Apache...	Macedonia ...	~ 44056-12...			
Record 22		Al Esposito	Henrys Har...	708 Apache...	Macedonia ...	~ 44056-12...			

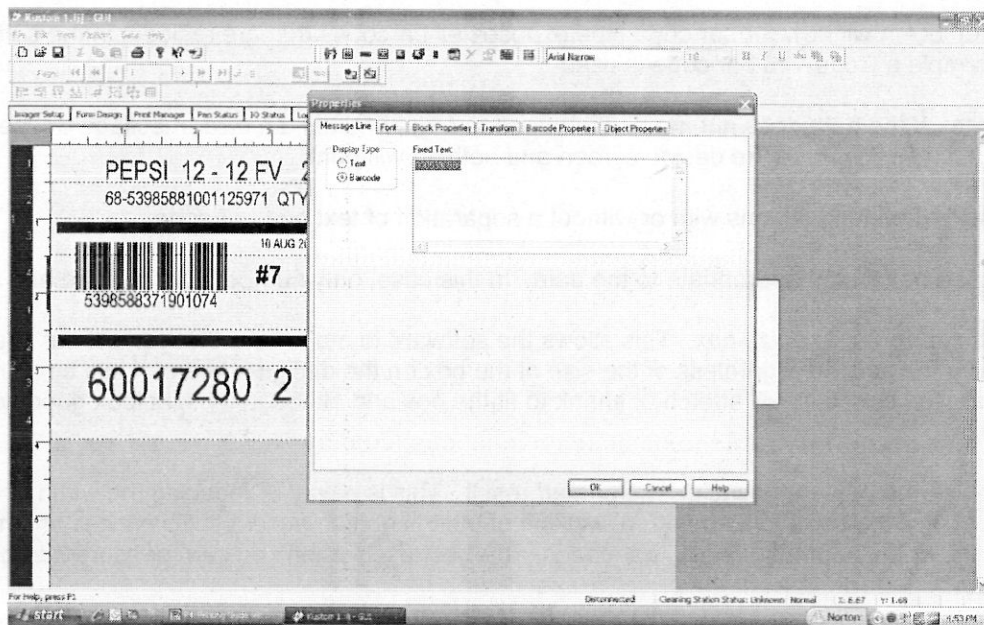
Advanced Printing Topics

The previous sections dealt with using the ACCUFAST software to print mail pieces featuring variable data. Much printing relies more on fixed data and text than variable data. The following sections will explore the printing of bar codes as a primary example of fixed data printing.

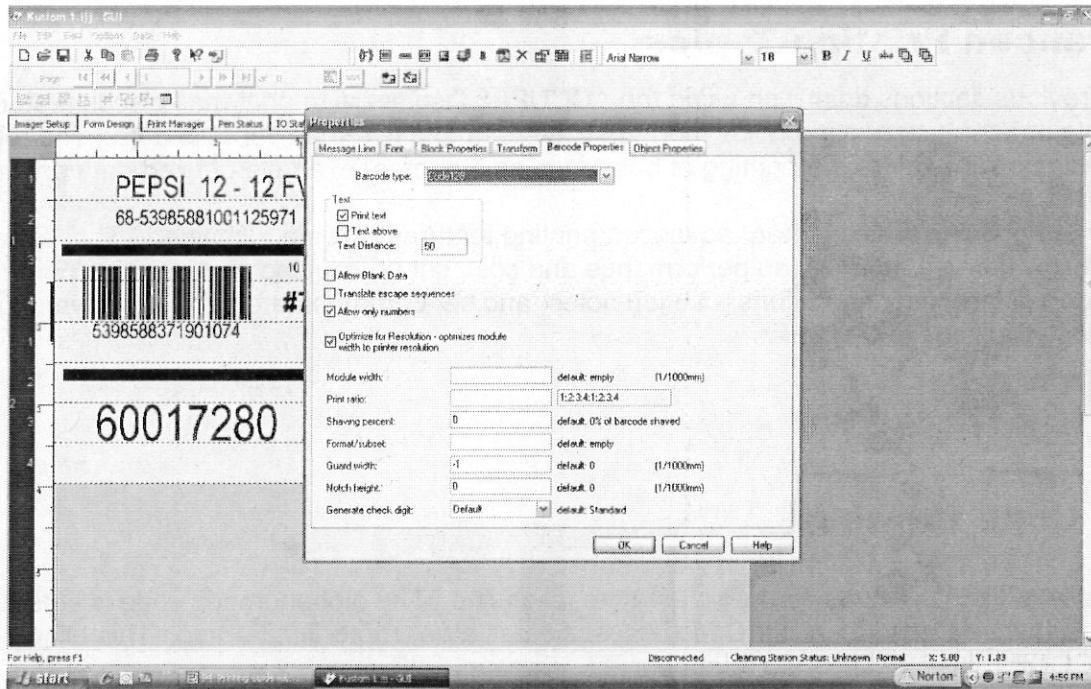
There are also several important advanced printing features that are explained. These features allow the user to track job performance and cost, set up capping and cleaning parameters, load different configurations, use job notes, and set pen parameters to take advantage of different inks' special properties.

Bar Code Printing

Typically, a fixed bar code will begin as a message line. The alphanumeric code is typed into the design screen and then Bar Code is specified as a descriptor for printing. This allows the BAR CODE PROPERTIES tab to appear.



Click on the Barcode Properties tab to access all of the various bar code options including the type of bar code, printing of text, calculation of check digit and the application of shaving.



1. The drop down window for bar code type exposes all barcodes that are resident in the software. In this example a Code 128 bar code is used.

Note: If the data does not match the bar code requirements, an error message will be displayed on the design screen and nothing will print.

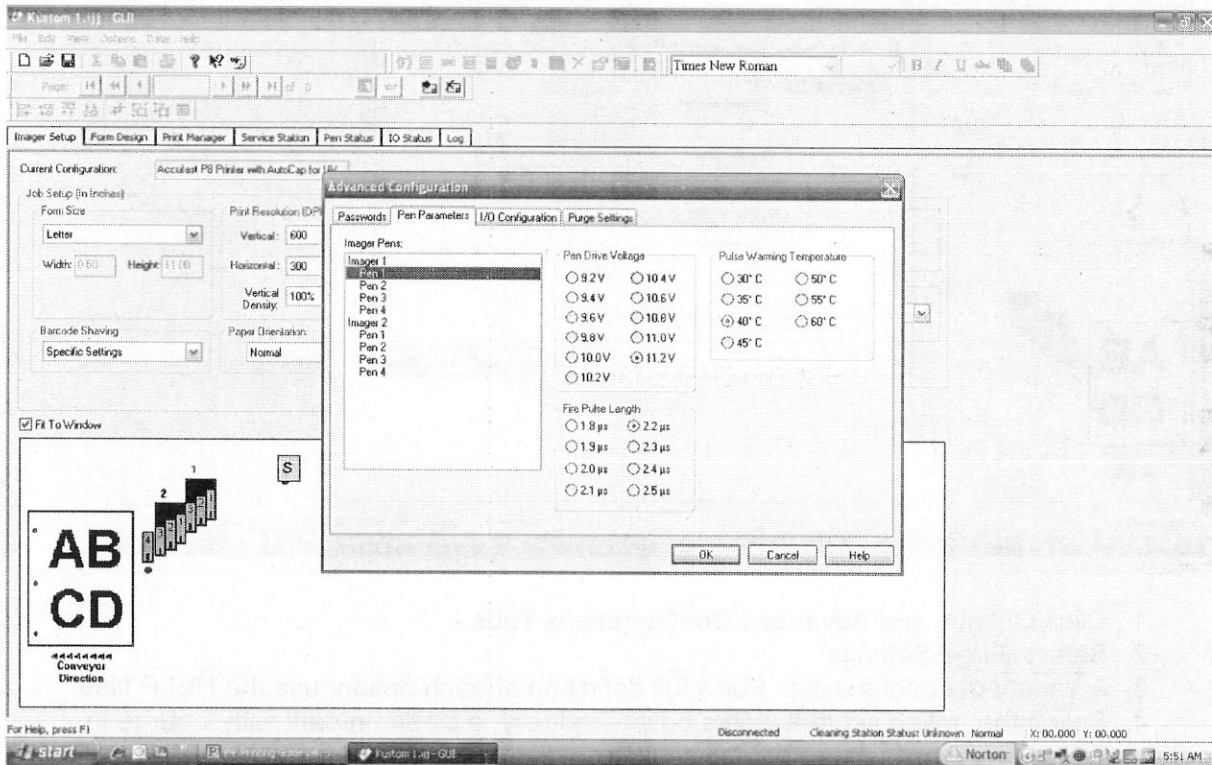
2. Choose text printing options with or without a separation of text and bar code.
3. Check the box that is appropriate to the data. In this case, only numbers are needed and allowed.
4. *Always check the optimize box.* This allows the software to make sure that correct bar code printing ratios are maintained regardless of the size of the box on the design screen. If this box isn't checked, the bar code will stretch or shrink to fit the box and although it might look good will be unreadable.
5. Adjust shaving percent based on the printed result. This is a way of reducing the width of the individual bars in the code to take natural wicking of the image into account. Shaving is an important tool in the creation of high quality bar codes. It is best used when you can measure the results with a verifier.

Many bar codes print best at reduced resolutions. Shaving might not be needed.

Specialty Inks

ACCUFAST Printers are often used to print on glossy materials such as aqueous coated mail and packaging items, PVC credit cards, phone cards, tags and the like. These non-porous materials require the use of special inks that use a solvent (typically an alcohol) as a carrier fluid in the ink rather than water. These inks need a different set of firing parameters to be successfully used.

The ACCUFAST print control software allows a user to assign different pen firing parameters to each cartridge installed in the machine. Once set, these parameters are stored as a part of a configuration file. Store the specialty inks files as separate configurations for use when a particular job dictates.



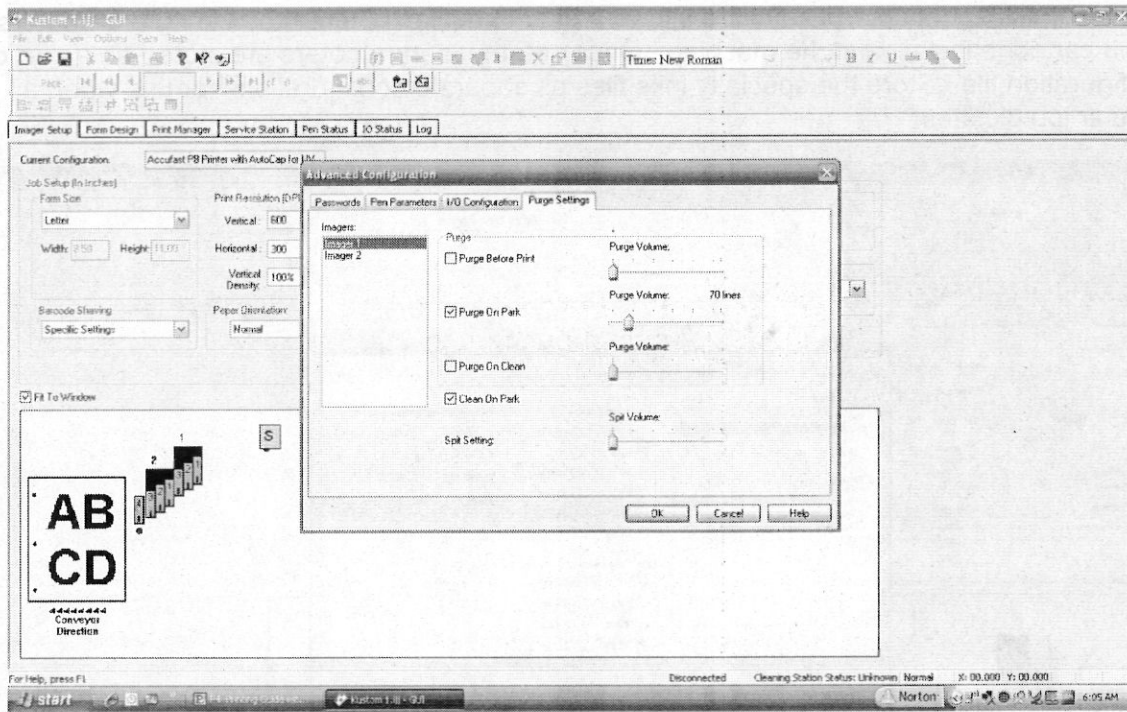
1. Click on the Options and Advanced Configuration Tabs
2. Click Pen Parameters
3. Select the pen (cartridge) number that you wish to edit.
4. By using the radio buttons, select the pen firing parameter that corresponds to the type of ink being used.
5. Click OK to save the pen parameter settings.

Note that you can set these parameters differently for each pen. This enables you to use solvent and water based inks side by side. If you are doing this, make sure that the system is set up correctly and that the pens are what and where they are expected to be in the imagers.

All advanced Configuration Settings are stored with a System Configuration.

Automatic Capping

Some imagers (3 pen jet engine—not found on P3, P4 or P8 Models) are equipped with an automatic capping feature. This is as it says a device that caps the pens after use. Several options exist in setting up an AC (AutoCap) imager. These options are in the Advanced Configuration Menu.



1. Click Options and Advanced Configurations Tabs.
2. Select Purge Settings
3. A variety of options exist. For a full definition of each option, use the HELP files.
4. Select the option set that works best. Typically, a clean on park with a purge in the cycle as well. Heavy purging wastes ink, keep it as little as works to clean the pen and preserve print quality.

Spit Volume comes into play when the Sparse Spit option has been selected (Options, Imager Configurations, Imager Settings).

To use the A/C features the Service Station Enabled box needs to be checked (Options, System Settings under Other Settings).