

Operations Manual

FOXJET

SoloSeries⁴⁵

Handheld Controller



**5780-346FX
Revision F**

FOXJET®

1 Missouri Research Park Drive * St. Charles, MO 63304 * 800-369-5384
Illinois Tool Works Inc. © 2009

TABLE OF CONTENTS

| | |
|--|----|
| Section 1: Introduction | 3 |
| Overview..... | 3 |
| Keypad..... | 3 |
| Display Elements | 4 |
| Section 2: Getting Started | 6 |
| Select the Unit of Measure | 6 |
| Adjusting the Display | 6 |
| The Status Screen | 7 |
| Configuring the Print Head(s) | 8 |
| Setting the Photocell Type, Print Speed, Print Direction, and Ink System | 8 |
| Synchronizing Multiple Print Heads to the Same Time and Date..... | 11 |
| Section 3: Print Messages | 12 |
| The Edit Screen | 12 |
| Edit Screen Menu Functions..... | 12 |
| Creating a Print Message..... | 13 |
| Set the Message Properties | 13 |
| Add the Print Fields..... | 14 |
| Select a Font..... | 15 |
| Set the Field Indent..... | 15 |
| Adding a Text Field..... | 16 |
| Adding a Date Code..... | 17 |
| Adding a Time Code | 18 |
| Adding a Product Count..... | 19 |
| Saving, Retrieving, and Deleting Print Messages | 20 |
| Saving a Message | 20 |
| Retrieving a Message | 20 |
| Deleting a Message | 20 |
| Printing a Message..... | 21 |
| The Print Screen..... | 21 |
| Print Screen Function Keys | 21 |
| Printing a Message from Memory..... | 22 |

Section 1: Introduction

This manual describes the operation of the Foxjet SoloSeries45 Handheld Controller as used to control SoloSeries45 Thermal Jet print heads. The Handheld Controller can be used to individually operate from one to four SoloSeries45 print heads hooked together in a daisy chain configuration: print head configuration may be set or checked, print head status can be monitored, and print messages can be created, edited, saved, retrieved and uploaded to the attached print head(s).

SoloSeries45 Thermal Jet print heads can operate stand-alone, so once they are set up and printing their operation can be secured by disconnecting the Handheld Controller. This feature also allows multiple SoloSeries45 print stations to be controlled using a single Controller. Simply carry the Handheld Controller to the print station that needs attention, plug in, perform the desired task, unplug and move on to the next print station.

Overview

The SoloSeries45 Handheld Controller has a back lit, 3.75" (95 mm) diagonal black and white graphics display and a 40-key keypad (see illustration, right).

LEDs on the keypad indicate **Power On** (upper right corner of the POWER key), **Shift Lock** (upper right corner of the SHIFT key), **Num Lock** (NUM LED, right side of LED bar just below F5), and which one of up to four possible print heads is being addressed (LED bar, LEDs 1 – 4).

A brief summary of the keypad and display operation follows. More detailed descriptions are given elsewhere in this manual as required.

Keypad



Function Keys: Use the five function keys (F1 – F5) at the top of the keypad to navigate from screen to screen and to select options within a screen. Each

key's function, which changes from screen to screen, is displayed at the bottom of the screen just above the key. When a function key has no function its corresponding spot at the bottom of the display is blank (see F5, right).



SHIFT Key: Press the **SHIFT** key for lower case letters; normal (un-shifted) keypad operation produces upper case letters. The **SHIFT** key operates push on/push off: press it once for shift mode, enter your lower case letters, then press it again to return to normal keypad operation. An LED in the upper right corner of the **SHIFT** key lights when the keypad is in the shift mode.



NUM LOCK Key: Press the **NUM LOCK** key to access the numeric keypad. The **NUM LOCK** key operates push on/push off: press it once for num lock mode, enter your numbers, then press it again to return to normal keypad operation. The **NUM LED** (located just under the F5 key) lights when the keypad is in the num lock mode.



Arrow Keys: Use the arrow keys to move input focus from one screen element to another, to move about within a screen element, and to move the cursor while creating or editing a print message. The arrow keys can also be used to stop from print head to print head on the **Print** and **Status** screens.



ENTER Key: Use the **ENTER** key to move input focus into and out off a screen element. For example, a screen has, among other elements, a list box, and using the arrow keys, the list box is selected. Selecting the list box gives it input focus, but focus is only on the exterior of the box, and if an arrow key is pressed input focus will move to another screen element. To move input focus to the interior of the box press **ENTER**: now use the arrow keys to select an item in the box. Press **ENTER** again to return focus to the exterior of the box.



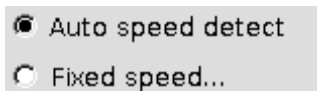
ESC Key: The **ESC** (Escape) key functions as a limited “undo” key. For any entry box, text or numeric, press **ESC** to undo any immediate changes made; for list boxes press **ESC** to return to the first item on the list.



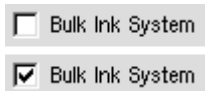
POWER Key: Press the **POWER** key to put the Controller into a low power sleep mode; press it again to instantly resume operation with no loss of data.
NOTE: If power is removed while the Controller is in the sleep mode any unsaved data will be lost.

Intelligent Operation: The number keys and the arrow keys feature *intelligent* operation: on screens where numeric input is the only possible operation (entering a product count, for example) the keypad automatically goes to NUM LOCK mode. Similarly, where up/down arrow key operation is the only choice possible (scrolling through the items in a list box, for example), using the arrow keys un-shifted automatically gives you up/down operation.

Display Elements



Radio Button: Used to indicate which option from a number of options is the current selection. A black dot indicates the selected option, a white dot an un-selected option. **Auto speed detect** is the selected option in the picture at left.



Check Box: Used to enable or disable an option or feature. A checkmark indicates the option or feature is enabled, white space indicates it is disabled.



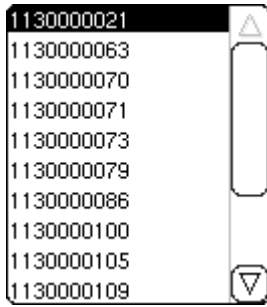
Edit Box: Used to enter or edit text or numeric data. An edit box must have input focus in order to enter or edit data.



An edit box has two types of input focus: exterior and interior. A large dashed line around the box indicates exterior focus. When an edit box has exterior focus, pressing an arrow key moves focus off the edit box and onto the next screen element.



A small dashed line around the box indicates interior focus. When an edit box has interior focus it is in the edit mode: data can be entered and edited, and pressing the arrow keys moves the cursor left and right through the data. Press **ENTER** to switch between exterior and interior focus.



List Box: Used to select one item from a list of many.

A list box has two types of focus: exterior and interior. A large dashed line (see Edit Box examples above left) around the box indicates exterior focus. When a list box has exterior focus, pressing an arrow key moves focus off the list box and onto the next screen element.

A small dashed line around the box indicates interior focus. When a list box has interior focus, pressing the arrow keys moves the selection bar up and down through the list.

Press **ENTER** to switch between exterior and interior focus.

Section 2: Getting Started

The Handheld Controller plugs into the left hand connector on the back of the SoloSeries45 print head. About twelve seconds after being plugged in the Startup Screen appears:



From the Startup Screen you can adjust the display's contrast and backlight brightness, select the units of measure used throughout the other screens, or proceed to the main operating screens. Once you exit the Startup Screen you cannot return except by cycling power to the Handheld Controller.

Select the Unit of Measure



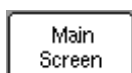
Press **English / Metric** (F3) to toggle between **English** (feet & inches) and **Metric** (meters & centimeters) units of measure. Radio buttons show the current selection. The selection is saved while the controller is turned off.

Adjusting the Display

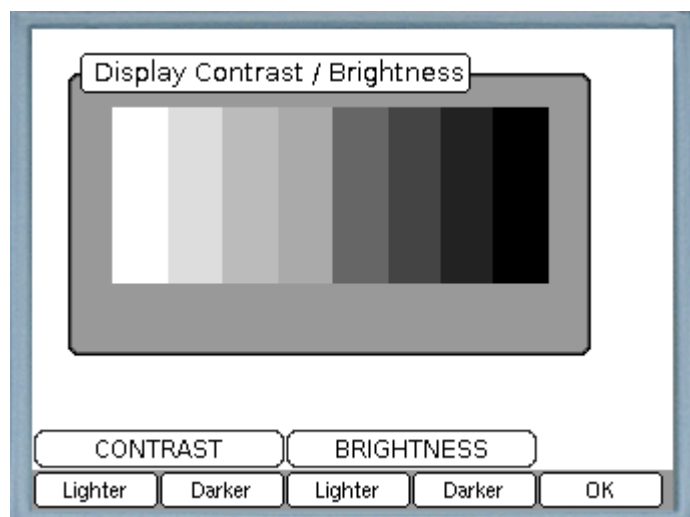


Press **LCD Contrast** (F1) to adjust the display's contrast or backlight brightness:

Adjust the contrast and brightness as desired, and then press **OK** (F5). The display settings are lost when the controller is unplugged.



Press **Main Screen** (F2) to proceed to the Print Screen. The Print Screen is one of three main operating screens; the other two are the Edit Screen and the Status Screen. Any one of the main screens is directly accessible from the others.



The Status Screen

The Status Screen displays the status of the currently selected print head, and function keys provide access to the Print Screen, Edit Screen, Print Head Selection Screen, and Print Head Setup Screens.

Print head status includes:

Print head: Indicates the current print head selection. Use the left/right arrow keys to sequence through the print heads, or go directly to a particular print head by pressing the 1 – 4 keys.

Photocells:

When a print head is configured to use its internal photocells the status is reported as

- no response – the controller received no photocell status information.
- off – neither photocell is blocked.
- left – the left photocell is blocked (as seen from the front of the print head).
- right – the right photocell is blocked (as seen from the front of the print head).
- both – both photocells are blocked.

When a print head is configured to use an external photocell the status is reported as

- no response – the controller received no photocell status information.
- off – the photocell is not blocked.
- on – the photocell is blocked.

Print status:

- printing – the print head is active. It will print when the photocell is blocked.
- paused – the print head is inactive. It will not print when the photocell is blocked.

Ink type:

- porous
- non-porous
- unknown – the controller received no ink type information, or the print head has a non-Diagraph print cartridge.

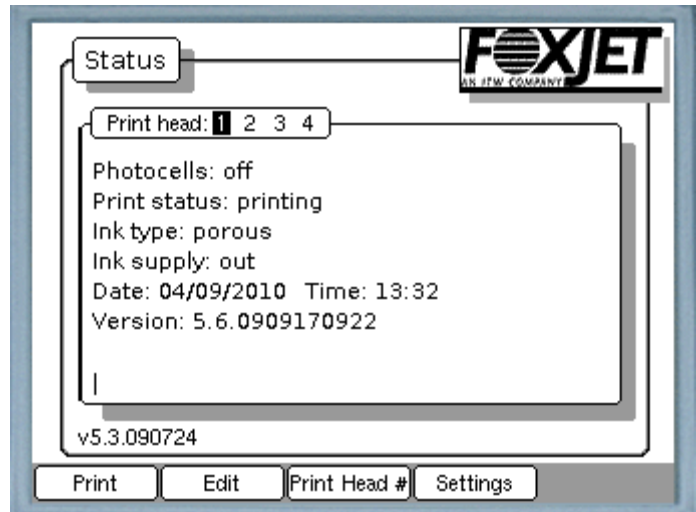
Ink supply:

- no response – the controller received no ink supply status.
- OK – ink supply is between 100% and 10%
- low – ink supply is between 10% and 2%
- out – cartridge has less than 2% of ink supply remaining.
- stop print – ink supply unknown or print head is in thermal shutdown; printing stops.

Date: 2-digit month, 2-digit date, 4-digit year as reported by the clock in the print head.

Time: Hours and minutes as reported by the clock in the print head.

Version: Print head firmware version number. At the lower left corner of the display, just above the **Print** and **Edit** buttons, is the Handheld Controller's firmware version number.

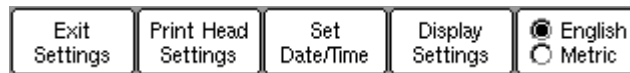


Configuring the Print Head(s)

The SoloSeries45 Handheld Controller operates from 1 to 4 print heads attached one to another in a daisy chain configuration, but communicates with only one print head at a time. LEDs 1 to 4 on the LED bar on the keypad indicate which print head is being addressed. Print head # 1 is always at the end of the daisy chain farthest from the controller, then moving towards the controller, print heads # 2, # 3, and # 4. The controller defaults to addressing print head # 1 at power up.

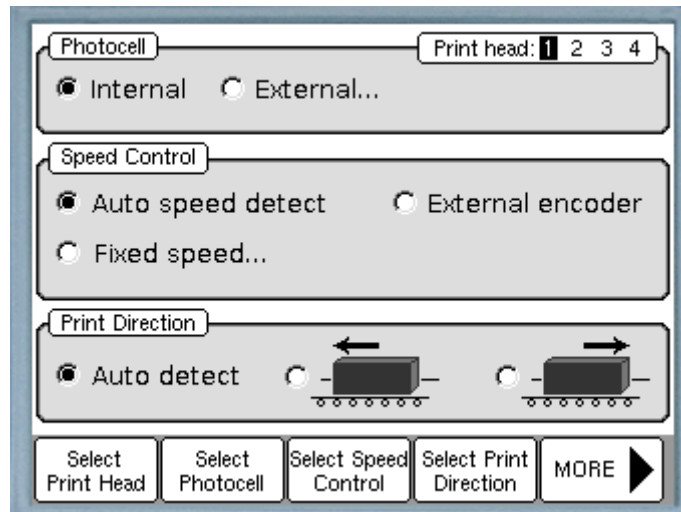
Print head: 1 2 3 4 The print head being addressed may be changed from any screen that includes an element similar to what is seen at left. On all but the Print Head Settings screen, sequence through the print heads by pressing the left or right arrow key; to go directly to a particular print head press the 1 – 4 buttons. To change print heads on the Print Head Settings screen press **Select Print Head** (F1). (See below.)

Settings To configure the print heads press **Settings**. The **Settings** button is F4 on the Status Screen, and F3 on the Print Screen. When **Settings** is pressed the Settings menu replaces the normal Status Screen or Print Screen menu at the bottom of the display:



Setting the Photocell Type, Print Speed, Print Direction, and Ink System

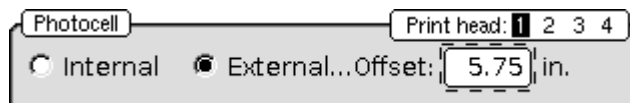
Print Head Settings Press **Print Head Settings** (F2) to select the print head's photocell type, method of controlling print speed, and print direction:



The Print Head Settings Screen shows the current configuration for the selected print head.

Select Print Head Press **Select Print Head** (F1) to select the desired print head. It takes a few seconds for the screen to update after changing print heads.

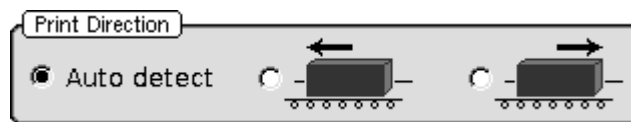
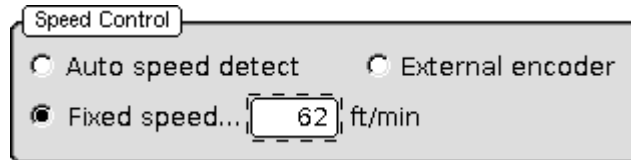
Select Photocell Press **Select Photocell** (F2) to toggle between the **Internal** and **External** photocell selections. Radio buttons indicate the current selection. When **External** photocell is selected a box appears for entering the photocell offset, which is the distance from the center of the photocell to the center of the print head. The maximum offset is 99.0 inches (251.4 cm).



Using an external photocell requires using either a fixed print speed or an external encoder, and a fixed print direction.

Select Speed Control

Press **Select Speed Control** (F3) to sequence through the methods available for controlling print speed: **Auto speed detect**, **External encoder**, and **Fixed speed**. The **Auto speed detect** method, which uses the print head's internal photocells to determine print speed, is not available when using an external photocell. Radio buttons indicate the current section. When **Fixed speed** is selected a box appears for entering the print speed. The maximum print speed is 200 ft/min (60.9 m/min).



Select Print Direction

Press **Select Print Direction** (F4) to sequence through the available print direction choices (see above): **Auto detect**, product travels **right to left** past the print head, and product travels **left to right** past the print head. **Auto detect**, which uses the print head's internal photocells to determine print direction, is not available when using an external photocell. Radio buttons indicate the current selection.

MORE ►

Press **MORE** (F5) to display page 2 of the menu:



Bulk Ink System

Press Bulk Ink System (F2) to enable/disable bulk ink system operation in a print head. A check mark in the box indicates bulk ink system operation is enabled. Configuring a print head for bulk ink system operation changes the method the print head uses to determine ink low and ink out conditions. Enabling bulk ink system operation in a print head that is using a standard print cartridge, and vice-versa, will cause incorrect ink level reporting.

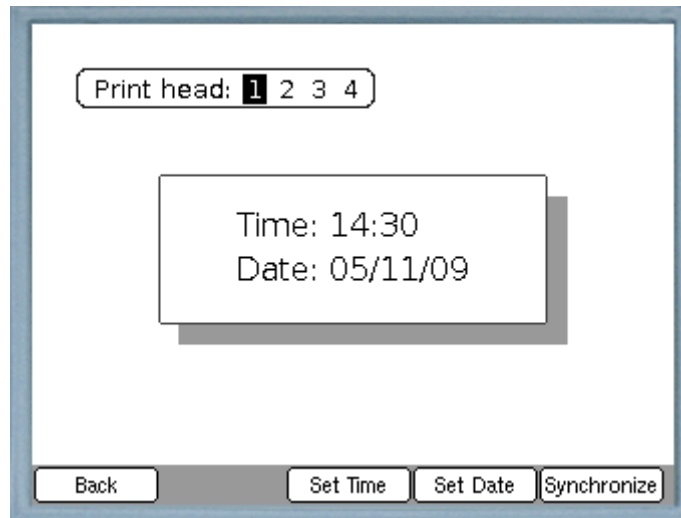
OK

Press **OK** (menu page 2, F4) when done to return to the Settings menu.

Setting the Time and Date

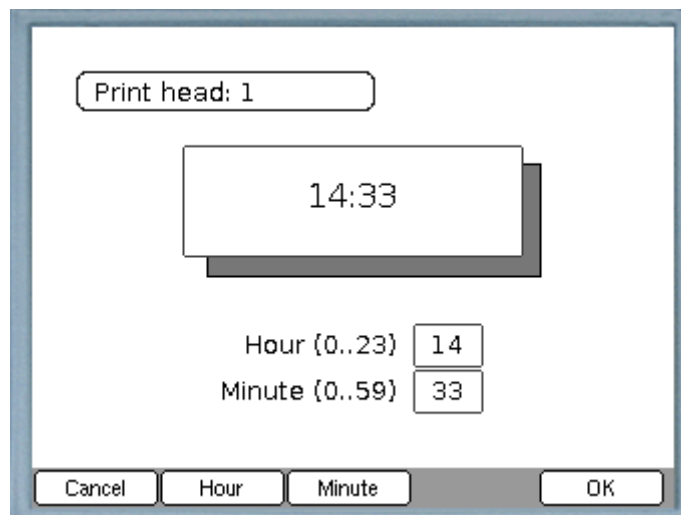
Set
Date/Time

Press **Set Date/Time** (F3 on the Setting menu) to display the current date and time as reported by the selected print head's internal clock:



Set Time

Press **Set Time** (F3) to set the clock:



Hour

Press **Hour** (F2); enter the hour.

Minute

Press **Minute** (F3); enter the minute.

OK

Press **OK** (F5) to set the selected print head's clock, then return to the Date/Time Screen.

Cancel

Press **Cancel** (F1) to return to the Date/Time Screen without changing the print head's clock.

Press **Set Date** (F4) to set the date:

Print head: 1

05/11/09

Month (1..12) 5

Day (1..31) 11

Year (2000..2030) 2009

Cancel Month Day Year OK

Press **Month** (F2); enter the month.

Press **Day** (F2); enter the date.

Press **Year** (F4); enter the year.

Press **OK** (F5) to set the date on the selected print head and return to the Date/Time Screen.

Press **Cancel** (F1) to return to the Date/Time screen without changing the print head's date.

Synchronizing Multiple Print Heads to the Same Time and Date

On the Date/Time Screen, press **Synchronize** (F5) to set all print heads in the daisy chain to the same time and date as that of the print head currently being addressed.

Press **Back** (F1) to return to the Settings menu.




Section 3: Print Messages

A print message, for purposes of using the Handheld Controller, is defined as all data printed by a single SoloSeries45 Thermal Jet print head. A print message may contain up to 10 data fields, with each field being fixed text, a date code, a time code, or a product count. Each field may be printed using a large (1/2") or small (1/4") Arial style font, and with the small font, two lines of data may be printed one atop the other.

The Edit Screen

Print messages are created, edited, and saved on the Edit Screen. Open the Edit Screen from the Status or Print Screen by pressing **Edit** (F2).

Dominating the central part of the Edit Screen are long text boxes for the input and display of the up to ten data fields that make up a print message. To the right of each of the field data boxes are boxes for displaying the field's indent, or its distance from the product's left edge, and a graphical representation of the font used to print the field. Images used to represent the font are:

-  = Large (1/2") font.
-  = Small (1/4") font printed on the top line.
-  = Small font printed on the bottom line.

At the top left of the Edit Screen is the message name; at the top right is the product width.

Edit Screen Menu Functions

At the bottom of the page is the Edit Screen menu. The Edit Screen menu contains a total of ten items spread over three pages. To scroll through the pages press **MORE** (F5). The entire Edit Screen menu is:

Print (F1): Go to the Print Screen. You will be prompted to save any changes.

Status (F2): Go to the Status Screen. You will be prompted to save any changes.

New (F3): Create a new print message. All fields are cleared, and field and message properties are set to their default values:

- The indent for field #1 is set to **0.00**.
- The font for field #1 is set to **Large**.
- Product Width is set to **12.00 inches** (30.48 cm).
- Repeat Print is set to **Off**
- Message name is set to **Untitled**.

File (F4): Save, open, and delete print message files.

Codes (Page 2, F1): Make a field a date, time, or count code.

Font (Page 2, F2): Select the current field's font: Large, Small top line, or Small bottom line.

Indent (Page 2, F3): Set a field's horizontal position by specifying its distance from the left edge of the product.

Clear (Page 2, F4): Clear or erase the current field contents; indent is set to 0.00; font is set to Large.

Width (Page 3, F1): Specify the product width.

Repeat (Page 3, F2): Specify if the message is to print continually in web mode.

Creating a Print Message

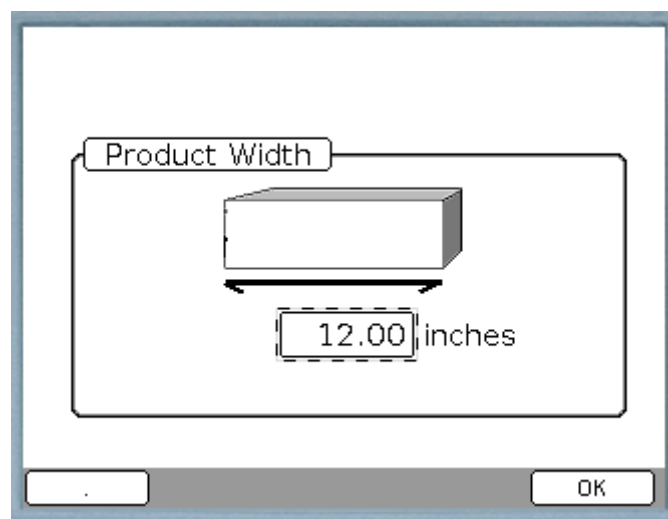
Press **Edit (F2)** from the Print Screen or Status Screen.

Press **New (F3)** when asked if you want to create a new message or open an existing one.

Press **MORE (F5)** twice to go to the third page of the Edit Menu.

Set the Message Properties

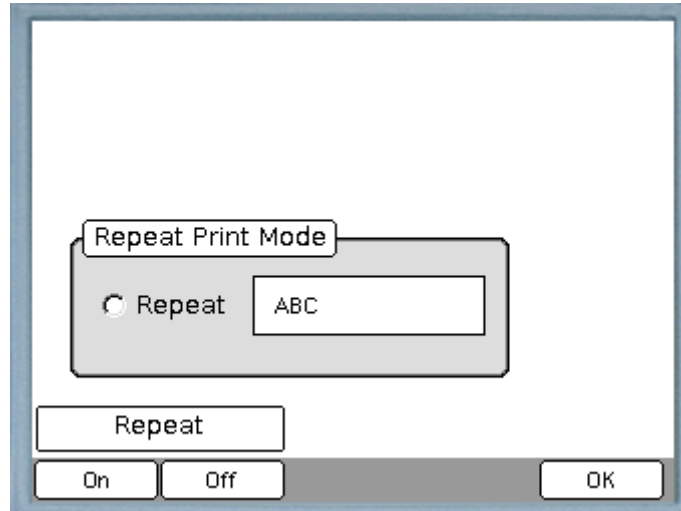
Press **Width (F1)** to open the Product Width Screen:



Enter the product width; to enter a decimal point press **F1** or the **W** key. For web printing applications enter the print-to-print distance as the product width.

Press **OK (F5)** to return to the Edit Screen. Note that the product width box at the top right of the display shows the product width just entered.

If the message is for a web application press **Repeat** (F2) to open the Repeat Print Screen:



Press **On** (F1) to enable repeat print.

Press **OK** (F5) to return to the Edit Screen.

Add the Print Fields

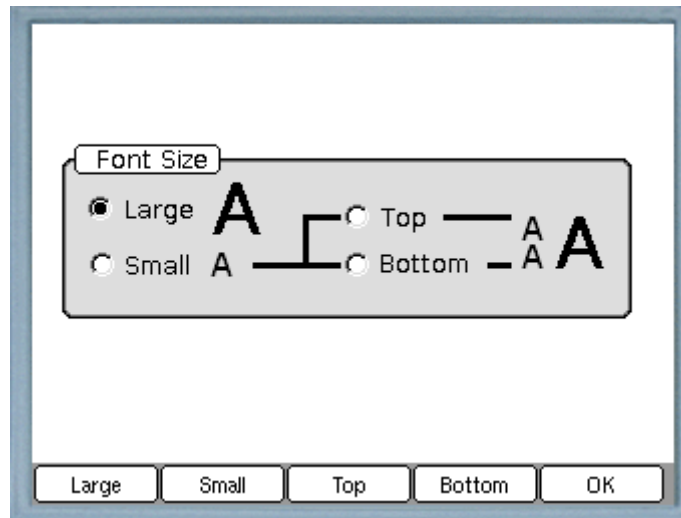
There are three steps to adding a field to a print message: select the font, set the indent, and enter the print data. The steps do not have to be performed in any particular order.

Use the **up/down arrow** keys to move from field to field.

PLEASE NOTE: In order for a message to print properly, print fields **MUST** be added in the order that they appear in the print message, left to right, top to bottom. To make this easier, the editor prevents any data from being entered into a field until the field before it contains data. Nothing can be entered into field #2, for example, until field #1 contains something. Also, as each field is entered, the minimum indent for the next field is calculated and added to the display. This indent is the *minimum* required to prevent a field from overlapping the field to its immediate left, and does not provide for any additional spacing between fields. If a field is not to be butted up against the one to its left its indent will need to be set larger than the minimum. See **Set the Field Indent** on page 15.

Select a Font

Press **Font** (Page 2, F2) to display the Fonts Screen. An 'X' in the check box indicates the current font selection.



Press **Large** (F1) to select the large font.

Press **Small** (F2) to select the small font, then...

Press **Top** (F3) to place the field on the top print line, or...

Press **Bottom** (F4) to place the field on the bottom print line.

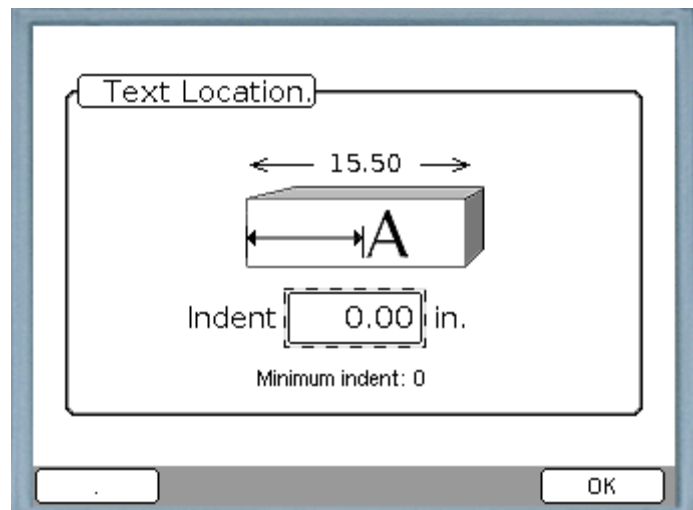
Press **OK** (F5) to return to the Edit Screen.

Set the Field Indent

Press **Indent** (Page 2, F3) to display the Indent Screen; the current indent setting is shown in the edit box.

Enter the indent; to enter a decimal point press **F1** or the **W** key. The indent cannot be made larger than the product width, or smaller than the minimum indent shown just beneath the edit box.

Press **OK** (F5) to return to the Edit Screen.



While field indents cannot be made smaller than the calculated minimums, but it is possible, when editing a field, to make the field longer than it previously was, or to move it to the right on the product, causing it to overlap any field to its immediate right. When this occurs the indent box on the next field turns black. See top of next page:

| Print Fields | | Indent | Font |
|--------------|--------------|--------|------|
| 1 | BEST BY | 0.00 | A |
| 2 | MM/YYYY,0060 | 2.65 | A |
| 3 | | 4.87 | A |

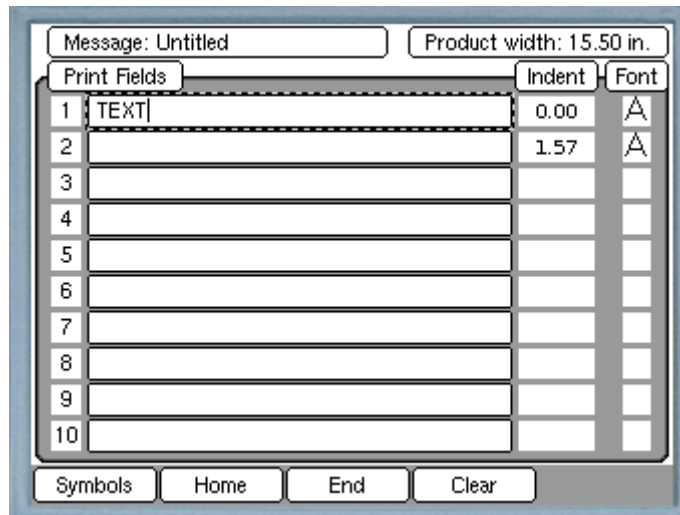
| Print Fields | | Indent | Font |
|--------------|-----------------|--------|------|
| 1 | BEST IF USED BY | 0.00 | A |
| 2 | MM/YYYY,0060 | 2.65 | A |
| 3 | | 4.87 | A |

The top figure on the left shows the message before field #1 is edited; the bottom figure shows it afterwards. The black indent box on field #2 indicates that the indent setting for that field is now less than the minimum necessary to prevent field overlap. To correct the error go to field #2 and press **Indent** to display the Indent Screen. The new minimum indent is automatically put in the edit box; change the indent to provide the field separation desired and press **OK** (F5).

Adding a Text Field

To add a text field to a print message, go to the first blank field, press **ENTER** to put the edit box into the edit mode, and enter the text. Press **ENTER** when done. A text field may have up to 52 characters, including spaces.

Upper case letters, lower case letters, and numbers can be entered directly from the keypad. Punctuation marks and other symbols are available via a symbol table. To access the symbol table the edit box must be in the edit mode, which displays the edit mode menu:



Symbols Press **Symbols** (F1) to display the symbol table.

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ! | " | # | \$ | % | & | ' | (|) | * | + | , | - | . | / | 0 | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | : | ; | < | = | > | ? | @ | A | B | C | D | E | F | G | H |
| I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | [| \ |
|] | ^ | _ | ` | a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p |
| q | r | s | t | u | v | w | x | y | z | { | | } | ~ | | ı | ø | £ | ¥ | |
| ı | § | ™ | © | ª | « | ¬ | - | ® | ° | ± | ² | ³ | ´ | µ | ¶ | · | ¸ | ¹ | |
| º | » | ¼ | ½ | ¾ | ¿ | À | Á | Â | Ã | Ä | Å | Æ | Ç | È | É | Ê | Ë | Ì | Í |
| Î | Ï | Ð | Ñ | Ò | Ó | Ô | Õ | Ö | × | Ø | Ù | Ú | Û | Ü | Ý | Þ | ß | à | á |
| â | ã | ä | å | æ | ç | è | é | ê | ë | ì | í | î | ï | ð | ñ | ò | ó | ô | õ |
| ö | ÷ | ø | ù | ú | û | ü | ý | þ | ÿ | | | | | | | | | | |

Use the arrow keys to select the desired symbol, and press **ENTER** to add the symbol to the text field and return to the Edit Screen.

When editing a message, to change a date, time, or count field to a text field, first clear the field (press F4 on page 2 of the Edit Screen menu).

Adding a Date Code

Codes To add a date code to a print message, go to the first blank field and press **Codes** (Page 2, F1) to display the Codes Menu:

| Print Fields | Indent | Font |
|--------------|--------|------|
| 1 TEXT | 0.00 | A |
| 2 | 1.57 | A |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |

Buttons: Cancel, Date, Time, Count

Date Press **Date** (F3) to display the Date Code Screen:

Use the arrow keys to select the desired date format from the list.

Date Offset If the date is to be offset (for a best by date, sell by date, etc.) press **Date Offset** (F3) and enter the number of days for the offset.

OK Press **OK** (F5) to add the date code to the print message and return to the Edit Screen.

Cancel Press **Cancel** (F1) to return to the Edit Screen without adding a date code.

Select Date Code Format

- DD
- JJJ
- MM
- MON
- MON YY
- DD/MM/YY
- DDMMYYYY
- MM/DD/YY
- MM DD YY

0000 days

Buttons: Cancel, Date Offset, OK

On the Edit Screen, a date code is displayed as the date format chosen followed by the date offset. See field #2, below.

| Print Fields | Indent | Font |
|-----------------|--------|------|
| 1 TEXT | 0.00 | A |
| 2 MM/DD/YY,0000 | 1.57 | A |
| 3 | 4.00 | A |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |

Buttons: Codes, Font, Indent, Clear, MORE

Adding a Time Code

Codes To add a time code to a print message, go to the first blank field and press **Codes** (Page 2, F1) to display the Codes Menu:

| Print Fields | Indent | Font |
|-----------------|--------|------|
| 1 TEXT | 0.00 | A |
| 2 MM/DD/YY,0000 | 1.57 | A |
| 3 | 4.00 | A |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |

Time Press **Time** (F4) to display the Time Code Screen:

Use the arrow keys to select the desired time format from the list.

OK Press **OK** (F5) to add the time code to the print message and return to the Edit Screen.

Cancel Press **Cancel** (F1) to return to the Edit Screen without adding a time code.

On the Edit Screen, a time code is displayed as the time format chosen. See field #3, below.

| Print Fields | Indent | Font |
|-----------------|--------|------|
| 1 TEXT | 0.00 | A |
| 2 MM/DD/YY,0000 | 1.57 | A |
| 3 hh:mm | 4.00 | A |
| 4 | 5.52 | A |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |

Adding a Product Count

Codes To add an incrementing product count to a print message, go to the first blank field and press **Codes** (Page 2, F1) to display the Codes Menu:

| Print Fields | Indent | Font |
|-----------------|--------|------|
| 1 TEXT | 0.00 | A |
| 2 MM/DD/YY,0000 | 1.57 | A |
| 3 hh:mm | 4.00 | A |
| 4 | 5.52 | A |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |

Buttons: Cancel, Date, Time, Count

Count Press **Count** (F4) to display the Count Screen:

Enter the starting count. Use leading zeros to specify the number of digits, up to a maximum of 9. The count may start at any value, but when it rolls over, it goes to 1. Counts print with leading zeros.

OK Press **OK** (F5) to add the count to the print message and return to the Edit Screen.

Cancel Press **Cancel** (F1) to return to the Edit Screen without adding a count.

Product Count

Enter starting count, including leading zeros.

0001

Buttons: Cancel, OK

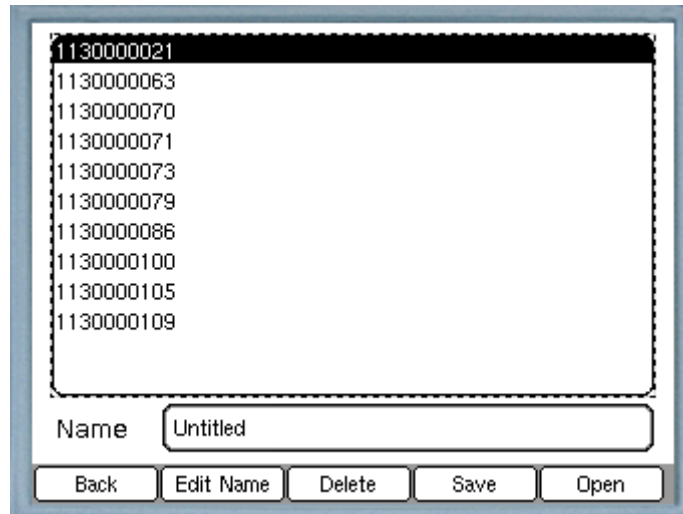
On the Edit Screen, a count field is displayed as shown in field #4 below.

| Print Fields | Indent | Font |
|-----------------|--------|------|
| 1 TEXT | 0.00 | A |
| 2 MM/DD/YY,0000 | 1.57 | A |
| 3 hh:mm | 4.00 | A |
| 4 000001 | 5.52 | A |
| 5 | 7.53 | A |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |

Buttons: Codes, Font, Indent, Clear, MORE

Saving, Retrieving, and Deleting Print Messages

Press **File** (Page 1, F4) to open the File Screen and display a list of existing print messages.



Saving a Message

Press **Edit Name** (F2) to assign input focus to the Name box. Enter a file name for the print message.

Press **Save** (F4) to save the message.

Press **Back** (F1) to return to the Edit Screen.

Retrieving a Message

Using the arrow keys, select the desired message from the list.

Press **Open** (F5) to open the file in the editor and return to the Edit Screen.

Deleting a Message

Using the arrow keys, select the desired message from the list.

Press **Delete** (F3) to delete the message.

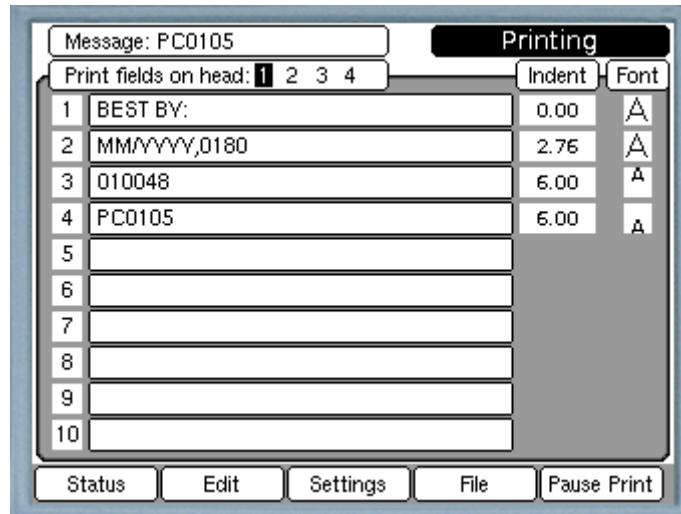
Press **Back** (F1) to return to the Edit Screen.

Printing a Message

Messages are sent to the print head(s) for printing from the Print Screen. The print screen also displays what the currently selected print head is printing, as well as allows the operator to pause and resume print.

The Print Screen

The Print Screen is accessible from either the Status or Edit screen by pressing **Print** (F1).



The information shown is retrieved from the print head so it may take a second or two for the screen to update when it is first displayed or when switching from print head to print head. Information shown is (left to right):

- The field number.
- The field's contents. In the illustration above, field 1 is text, field 2 is a date code with a 180 day offset, 3 is a product count, and 4 is text.
- The field's indent.
- The field's font. Fields 1 and 2 use the large font, field 3 uses the small font on the top line, and field 4 uses the small font on the bottom line.

And along the top of the screen:

- The message's file name.
- The currently selected print head.
- The current print status: Printing or Paused.

To select a different print head, use the left/right arrow keys to sequence through the heads, or go directly to a particular print head by pressing 1 – 4. The print head currently being addressed is indicated by the black square.

Print Screen Function Keys

Press **Status** (F1) to go to the Status Screen.

Press **Edit** (F2) to go to the Edit Screen.

Press **Settings** (F3) to display the Settings Menu.

Press **File** (F3) to open a print message file and send it to the currently selected print head for printing.

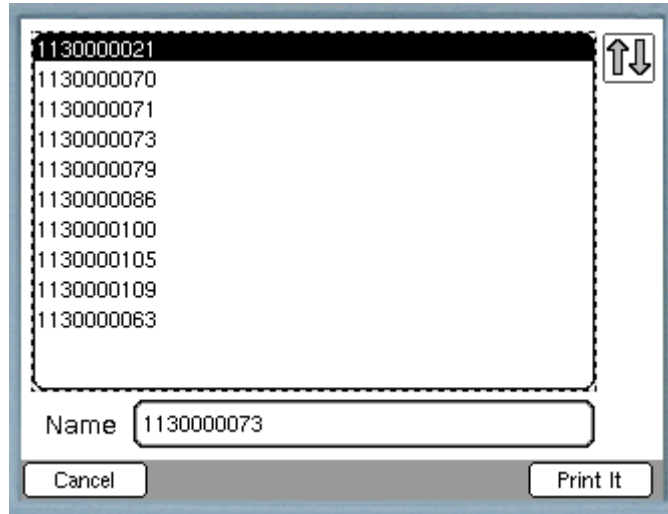
Press **Pause/Start Print** (F5) to toggle print on and off. Press **Pause Print** to stop print; press **Start Print** to resume print.

Printing a Message from Memory

To print a message previously created and saved in memory:

On the Print Screen:

Press **File** (F3) to open the File Screen:



Use the arrow keys to select the desired message.

Press **Print It** (F5) to open the message, send the message to the print head for printing, and return to the Print Screen.

Press **Cancel** (F1) to return to the Print Screen without opening a file or changing the print message.