

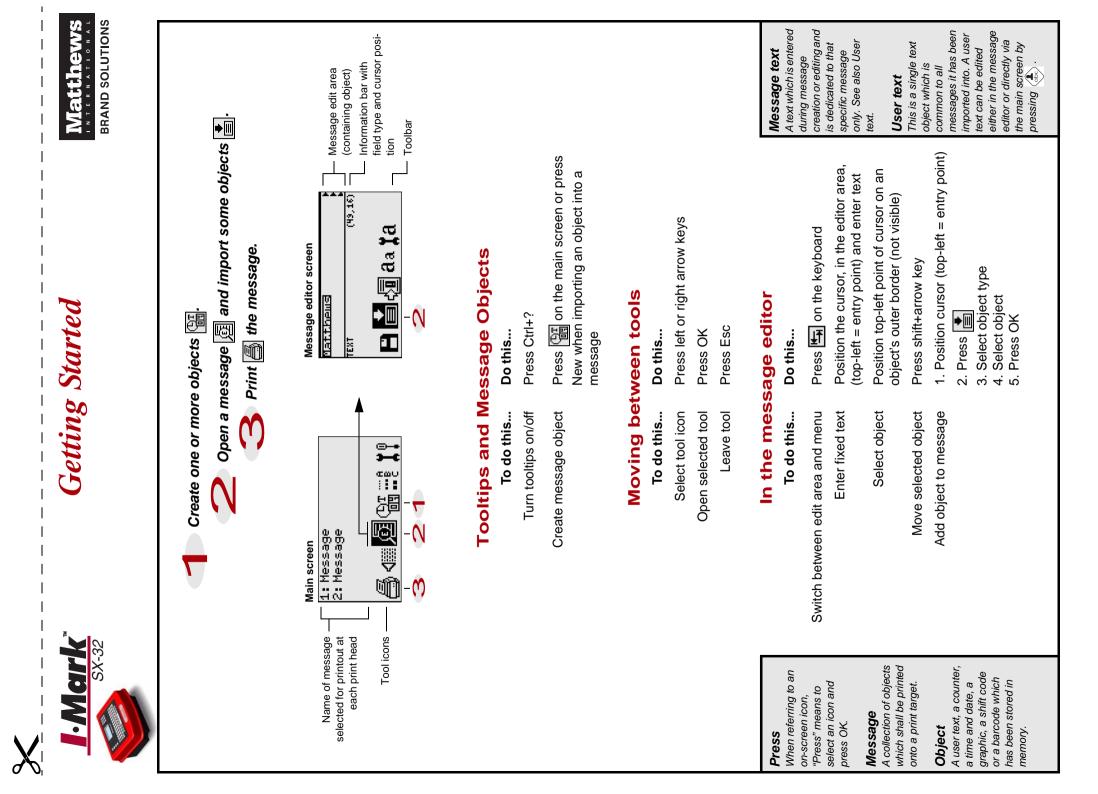




Operator Manual

Version: 2 Issue: 1

Order number: MS795-801-01





Menu Structure

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	C Set date and time
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Introduction

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Safety & Certification

This symbol and text format is used throughout this manual to indicate circumstances that may be dangerous to the user or that can cause damage to the equipment. This symbol and text format is used throughout this manual to draw your attention to important information and tips.

Safety Requirements

Matthews Swedot AB and Matthews Marking Products disclaim all responsibility regarding the CE directive if the printer is used, altered or installed in any way other than described in this manual.



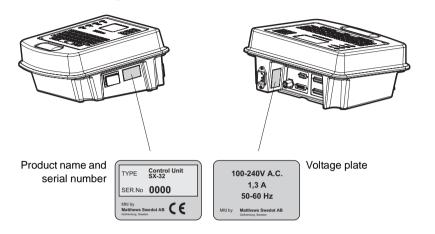
Please note the following warnings:

- Please read all instructions before using the printer for the first time.
- Do not attempt to open the electronic unit or other sealed parts. These parts cannot be serviced by the user.
- Never point the nozzle end of a print head at yourself or another person.
- Never expose the unit to liquids or high humidity.
- All chemicals, even ink, may present unknown health hazards, and should be treated with caution. Please refer to the Material Safety Data Sheet for further information.
- Always disconnect the power cable before performing any service or maintenance on the printer.
- Never use sharp or pointed tools when cleaning or replacing the print head.
- Disconnect the power to the printer and call in qualified personnel under the following conditions:

The power cable or plug is damaged or worn • Liquid has been spilled on the printer • Rain or water has got into the printer • The printer is not functioning correctly despite the user following the instructions for use • You have dropped the printer or the casing has been damaged. • The printer is not functioning correctly and requires service.

Introduction

Printer Labelling



Certification

This printer is certified in accordance with the requirements for CE marking.

This equipment complies with the EMC Rules for a Class A (industrial environment) computing device. Operation of this equipment in a residential area may cause unacceptable interference to radio and TV reception.

About this Manual

This manual contains operator information specifically for the SX-32 and only refers to print heads and ink supply units in general terms. For information on specific print heads and ink supply units, please see the relevant documentation.

For technical information such as installation instructions, etc. please see the Technical Manual delivered with your SX-32.

Symbols & Terminology

At the beginning of many of the instructions in this manual, an illustration showing a row containing blocks of icons separated by arrows can be found. Each block depicts a collection of icons (toolbar) which can be found at the bottom of the SX-32 screen.

The illustration can look something like this:

ℰⅆ⅀ℍℿ

This is the "path" you should follow, through the menu structure, to get to the function described in the instruction which follows.

When an icon is highlighted it means that the reader should: "Use the arrow keys to select this tool icon". An arrow (\blacklozenge) shows that pressing OK will cause a new toolbar to appear.

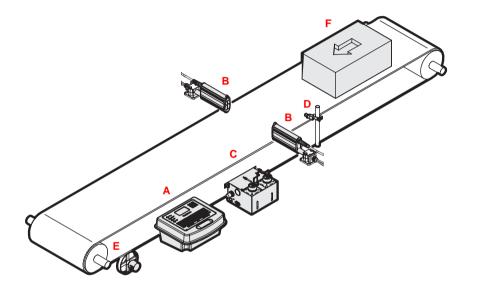
This tool icon has been selected



OK has been pressed and the toolbar is replaced with a new

Overview

System Description



A - The SX-32 Control unit

The SX-32 is an ink jet printer which uses up to four print heads for printing messages. The print heads are controlled using input from equipment such as a speed encoder, a print activator and a PC. Print direction is set individually for each print head.

B - Up to four Print heads

The print heads use ink from the ink supply unit to mark a print target (F) according to the signals received from the control unit.

C - An ink supply unit

Used for supplying ink and cleaner fluid to the print heads.

D - A printout activator (option)

A print activator (usually of photocell type) is used to detect the presence of a print target (F) and signal the control unit that it is time to print.

E - A speed encoder (option)

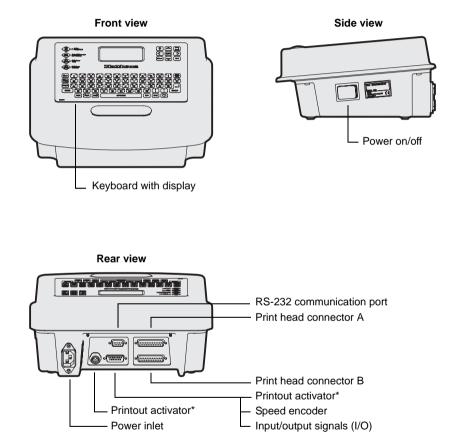
A speed encoder converts the motion of the print target (F) into electrical pulses. The pulses are used by the control unit as a reference when automatically adjusting the horizontal gap between dots to suit the speed of the print target. Usually the speed encoder is mounted onto the conveyor line and reads off the target speed from there. A speed encoder is always necessary when the print target speed can change during printout or is uneven.

Overview

The Control Unit

Main Parts

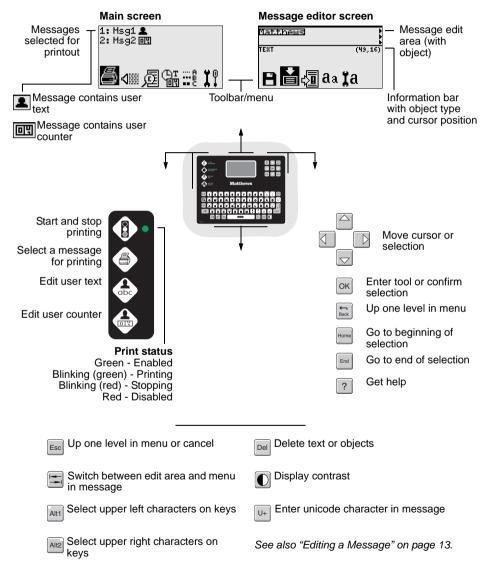
See below for more information on the keyboard and display.



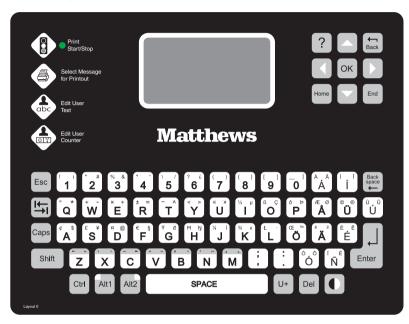
* Alternative connection types. Only one printout activator may be connected.

Keyboard & Display

See the next page for the full keyboard layout.



The full keyboard layout.



Overview

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Learning the Basics

Introduction

Before using your SX-32 printer for the first time, it's a good idea to familiarise yourself with all the parts of the printer and the equipment connected to it. The Overview section of this manual is a good place to start.

The next step is to get an understanding of how to use the printer; that is where the Learning the Basics chapter comes in. To keep things simple, this chapter is divided up into the following two main parts:

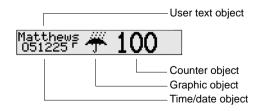
- A tutorial which will walk you through the basic steps of creating an object and a message and then printing the message.
- More detailed information on editing messages and creating objects.

The Basics

But first, we shall go through the very basics of using an ink jet printer. Terms such as *object* and *message*, perhaps need to be explained and the course of events which lead to a message being printed may need to be outlined.

What's a Message?

A message is, quite simply, a collection of information which is printed by the control unit. Messages are, for the most part, made up of objects which have been saved in memory and then imported into the message. Below is an example of a message (as shown in the display) containing some objects:



An imported object is a linked copy of the original which means that any change made to the original will be reflected in all messages that contain a copy.

When an object has been imported into a message it is contained in its own field which can be selected for making adjustments. See "Editing a Message" on page 13.

The different Object types are:

Message text - User text - Counter - Time/date - Graphic - Shift code - Barcode

From Nothing to a Printed Message

There is a sequence of events one should follow when creating a message and then printing it. This procedure is covered both in the following tutorial and under Getting Started at the beginning of this manual, but it's worth mentioning again because it is fundamental to operating the SX-32.

- 1 If necessary, create some objects.
- 2 Open an existing message (or create a new message) and import an object or two. Perhaps you will want to enter a text directly in the message (a message text).
- 3 Print the message.

Basically, that's all there is to it!

Learning the Basics

Tutorial

The following exercises will guide you through the process of creating and printing a message and, at the same time, give you insight onto the build-up of the control unit menu structure.

It is important that all three exercises are carried out on the same occasion.

These exercises take you through the following procedures:

- Exercise 1 Create an Object
- Exercise 2 Create a Message
- Exercise 3 Save and Print the Message

Although the message created in this tutorial will be sixteen dots in height, which is the factory setting, your SX-32 may have been set up for a 7 or thirty two dots. This has no bearing on the tutorial; the exercises can be carried out irrespective of the setup.

Hopefully the message will look something like this at the end of exercise three.



Before starting exercise 1, please make sure that the control unit has been properly installed and is ready to print.

Exercise 1 - Create an Object

The object of this exercise is to create a counter object^(a) which will later be included (imported) in a message for printing. The counter will be set up to count from 01 to 10.

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1 Follow the above path and, when prompted, select New to open a new counter.

The display will now show the current settings. In this case they are the default settings for all new counters. **2** Press and set the counter according to the following:

		e	e	
Counter type	Numeric			
Start value	01			
End value	10			
Current value	01	This will be t	he first number printed	
Number of digits	2			
Leading zeros	Yes		sary, this will fill out the Number of digits settin	

3 Press \blacksquare and save the counter object with the name 01-10.

Exercise 2 - Create a Message

Now we shall create a message which shall contain a message text^(b) and the counter object called 01-10.

≜⊲≣⊠∰≣!!!

1 Follow the above path and, when prompted, select New to open a new message.

The display will now show the message editor screen with the cursor (\square) in the top left hand corner. The position of the cursor decides where text end objects appear in the message. The numbers, e.g. (1,16), show the position of the cursor.



2 Enter the text *ABC*.

Notice that, as you are entering the text the type of object is shown in the display, in this case TEXT.

3 Now press D, on the keyboard, 4 or 5 times so that the cursor moves a few steps to

a. A counter object is used for printing a number (such as a serial number) which is updated after each printout. For more on creating counters, see "Counter Objects" on page 17.

b. A message text is a text which is entered directly into a specific message, and is unique for that message. Alternatively a user text is a single text which is common to all messages in which it is contained. See also "The User Text Object" on page 15.

the right. This is where we shall import the counter.

Notice that pressing \square , on the keyboard, ends text entry (the type of object is no longer shown). The text is now an object which can be selected (with the cursor), edited and repositioned. For more on manipulating objects, see "Editing a Message" on page 13.

- 4 Press 🚍, on the keyboard, to access the message editor's toolbar.
- **5** Press and select the Counter object type.

\mathbf{Q}

Notice that instead of selecting the stored counter you could have selected New and created the counter here (instead of via the Objects menu as we did in the first step of exercise 1). All object types have this alternative^(a).

6 Select the counter 01-10.

The counter object now appears at the cursor position. Notice that both the type of object and the name of the object are shown while the object is selected (surrounded by a border). Go back to the message editor (press =) and try moving the cursor back and forth and you will see this information appear as the object is selected and disappear and when it is not.

Also, with the counter object selected, try pressing and holding the selected, try pressing and holding the keyboard key and, at the same time, press an arrow key a few times. Notice that this makes the object move in the direction of the arrow key. Pressing the key at the same time will make the object move in larger steps.

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An alternative to using the 🖹 key to switch between the message editor and the toolbar is to use the up and down arrow keys to move the cursor. When the cursor reaches the lower border of the message editor you will access the toolbar. Pressing the up arrow will return you to the editor.

Exercise 3 - Save and Print the Message

Now the message is ready so it is time to save it and print it.

- 1 Press 🚍, on the keyboard, to access the message editor's toolbar.
- **2** Press \blacksquare and save the message with the name *ABC*.
- **3** Press **E**, on the keyboard, to exit the message editor and press **E** to access the print screen.
- **4** Select our message called *ABC* and press \square .

The message in now previewed on the screen.

5 Press **o**, on the keyboard, to select the message for printout.

If your SX-32 is set up to use a single print head, the message will now be selected at that head. If you are using more than one print head, you will be prompted to select the heads which shall print this message. Select print head 1.

As long as the print status lamp $\langle \mathbf{B} \rangle \bullet$ is green, the message *ABC* will be printed each time a print target passes in front of the printout activator. To stop printing press $\langle \mathbf{B} \rangle$ so that the print status lamp lights red or select the special message [Blank] for printout.

Congratulations, you have now created and printed your first message.

To learn more, see "Messages & Objects" on page 13.

a. This does not apply to graphics which can only be created and edited externally.

Learning the Basics

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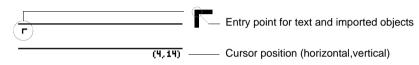
Messages & Objects

Editing a Message

See also "Learning the Basics" on page 9.

Adding Text & Importing Objects

1 Position the cursor.



2 Press and select an object.

Repositioning Objects

1 Select the object which shall be moved.

The object type and name is shown on the information bar when the object is correctly selected.

Position this point of the cursor over any part of the object. Cursor in message text and user text Border around other objects

- 2 Press and hold sime and press an arrow key or press and hold sime together with or and press an arrow key.
 - SMT + any arrow key
 SMT + CM + any arrow key

 Image: CM + CM + any arrow key
 Image: CM + CM + any arrow key

Changing the Message Object Settings

When opening a new or existing message, the settings for new objects are:

Font size	7 dots high	
Bold	0 (not bold)	4 🔶 🗲
Reversed	Normal (forward)	4 🔶
Inverted	Normal (not inverted)	4 🔶 🕇
Negative	Normal (not negative)	4 🔶 🖪

Carry out the following to change the object settings for new objects. The new settings will apply until the message editor is exited.

- 1 In the message editor, make sure that no object is selected (the r cursor is shown).
- 2 Press **a** to change the font, and **x** to change the appearance attributes.

Changing the Object Settings for a Single Object

1 In the message editor, select an object (see Repositioning Objects).

2 Press ener or on the keyboard.

Object type	Pressing enter does this	Pressing 🚾 does this
Message text	Start a new line	Change font size
User text	Start a new line	Change font size
Counter	Edit object data	Edit object data
Time/date	Edit object data	Edit object data
Graphic	Edit appearance attributes	Edit appearance attributes
Shift code	Edit object data	Edit object data
Barcode	Edit object data	Edit object data

Deleting Objects from a Message

Objects are only deleted from the current message and not from the object library.

- 1 In the message editor, select an object (see Repositioning Objects).
- **2** Press **Del** on the keyboard.

Editing a Message

Deleting Messages from Memory

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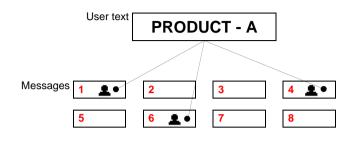
See also "Deleting Objects from Memory" on page 31.

- **1** Follow the above path.
- **2** Select the message to be deleted.
- **3** Press **Del** on the keyboard.

The selected message will now be deleted from memory.

If the deleted message was selected for printout, it will be replaced by an empty message called [*Message n*] where n is an automatically generated number.

The User Text Object



What's a User Text?

The user text is a single and therefore unique text which can be contained in any number of messages and be quickly edited by pressing $\langle \mathbf{k} \rangle$.

A user text can be used in situations where, for example, a batch number or product type is contained in several messages and needs to be changed occasionally. Letting the user text contain this information will mean that editing the text can be done quickly and without having to enter and edit each message individually.

Importing Into Messages

Any object can be imported into messages where it can be moved, its data edited (not graphic objects) and its appearance changed. Please see "Editing a Message" on page 13 for more information.

Editing or Deleting a User Text

Changing the contents of a user text can be done in one of these three ways:

• Press (when a message containing a user text is selected for printout (shown with the **k** symbol on the main screen).

Main screen



This message contains one or more user text objects

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• By editing the user text origin in the objects menu.



• By editing a user text object in a message.

But remember, all three methods have exactly the same result, namely that all messages containing the user text (including those being printed) will be immediately updated.

The User Text Object

¹⁶ I-Mark SX-32 Operator Manual Version: 2 Issue: 1

Counter Objects



What's a Counter?

Counters are used to print, for example, a serial number or batch count onto a product. A counter is a number or alphanumeric code which begins counting at a start value (A in the example above) and automatically increases or decreases in value until it reaches an end value (B).

The counter can be set to begin counting at any value within the counting sequence (C) - this value can be manually reset at any time. See "Manually Resetting a Counter" on page 18.

Creating a Counter Object

- **1** Follow the above path to enter the counter tool and then select New.
- **2** Press is to enter the basic counter settings.
- **3** Select numeric for a counter which shall consist of only numeric data or alphanumeric for a counter which shall consist of numeric or alphabetic data or a mixture of the two.

4 Set the counter parameters according to the following table:

Parameter	Description
Format (alphanumeric only)	 For setting the data type for each separate character in the counter: Enter 9 for any numeric character (0 to 9). Enter <i>f</i> for any lower case hexadecimal character (0 to f). Enter <i>F</i> for any upper case hexadecimal character (0 to F). Enter <i>a</i> for any lower case letter (a to z). Enter <i>A</i> for any upper case letter (A to Z).
	Note that the total number of format characters determines the length of the counter.
	Example - Format $99Fa$ gives a counter with two numeric characters (99) followed by an upper case hexadecimal character (F) and a lower case letter (a) at the end. The counter will consist of four characters.
Start value	The counter starts here (see also Current value). Setting this value higher than the end value will create a down-counter.
End value	After this value is reached, the counter will continue from the start value.
Current value	This is the manual start point; the counter will start from here the first time around. This value can be manually reset during printing, see "Manually Resetting a Counter" on page 18.
Number of digits (numeric only)	Enter the total number of digits the counter shall consist of.
Leading zeros	The counter will fill out with zeroes when not at full length (set at Number of digits).

5 Set the advanced counter parameters according to the following:

Parameter	Description
Step value	Example - 1 for counting in steps of 1 (1 2 3 4), 2 for counting in steps of 2 (1 3 5 7), etc.
Batch count	This is the number of times each step shall be printed. E.g. 2 will cause each step to be printed twice (1 1 2 2 3 3).
Cause	Select the counter update method. - Command only for update via serial interface - End of trig for update after each printout activation

Counter Objects

6 Press **B** and give the counter a name.

Importing Into Messages

Any object can be imported into messages where it can be moved, its data edited (not graphic objects) and its appearance changed. Please see "Editing a Message" on page 13 for more information.

Manually Resetting a Counter

Counters can be reset using one of the three following methods:

• By pressing () when a message containing one or more counters is selected for printout (shown with the I symbol on the main screen).

Main screen	
1: Msg1 单 2: Msg2 🔍	
2: 0592 03	counter objects
.:: ::::::::::::::::::::::::::::::::::	

• By editing the counter origin in the objects menu.



• By editing a counter object in a message. In this case the counter is reset when the counter object is saved, not when the message is saved.

But remember, all three methods have exactly the same result, namely that **all messages containing the counter (including those being printed) will be immediately reset**.

Deleting a Counter Object

See "Deleting Objects from Memory" on page 31.



Time & Date Objects



Time and date screen

[New]	
Format:	DD-MM-YY
Offset (days)): 10
Current: Ū	12-02-06
80	

Time and date objects are used when printing, for example, a packing date or an expiry date onto a product.

Creating a Time & Date Object

- 1 Follow the above path to enter the time and date tool and then select New.
- **2** Press 🛅 to set up the time and date object.
- **3** Set the parameters according to the following table:

Parameter	Description
Format	Select a time or date segment format. MM - Month with two digits DD - Day with two digits YY - Year with two digits YYYY - Year with four digits JJJ - Julian date with three digits mmm - Month with three letters hh - Hour with two digits
	mm - Minutes with two digits XM - AM or PM
Separator	This is the character used to separate time or date segments.
Expiry (date format only)	Switch on if the date object is an expiry date (shall be offset a number of days from the print date).
Offset (only if expiry set to on)	Enter the number of days the expiry date shall run ahead of the print date.

4 Press **•** and give the time and date object a name.

Importing Into Messages

Any object can be imported into messages where it can be moved, its data edited (not graphic objects) and its appearance changed. Please see "Editing a Message" on page 13 for more information.

Deleting a Time & Date Object

See "Deleting Objects from Memory" on page 31.

Time & Date Objects

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Your SX-32 printer is delivered with several graphic objects pre-installed. Graphic objects can neither be created nor edited within the SX-32 but can be created externally and down loaded to the SX-32 via the serial interface. Please contact your dealer for more information.

Viewing

- **1** Follow the above path to bring up a list of graphics.
- **2** Select a graphic.
- **3** Press \square to view the graphic together with its details.

Importing Into Messages

Any object can be imported into messages where it can be moved, its data edited (not graphic objects) and its appearance changed. Please see "Editing a Message" on page 13 for more information.

Deleting a Graphic Object

Graphics objects can only be deleted from messages and not from the objects library. For more information see "Deleting Objects from Memory" on page 31.

Graphic Objects in Memory

The following table shows the pre-installed graphic objects available in memory.

Name	Dimensions in dots (width x height)	Appearance
CE	21 x 16	(€
Cold	15 x 16	(Sheet 1 of 3)

Name	Dimensions in dots (width x height)	Appearance
Crown	23 x 16	ф
CSA16	15 x 16	<u> </u>
EUR32	56 x 32	EUR
Fragile	7 x 16	•
Heat	12 x 16	Å
Knife	16 x 16	×
NF32	48 x 32	
NSF6116	51 x 16	NSF-61
NSF9	20 x 9	NSF
NSFDWV16	58 x 16	N\$F-dwv
NSFPW16	58 x 16	NSF-dwv
PE-LD	29 x 32	
Poison	22 x 16	
R9	10 x 9	R
Recyc1	24 x 16	ත්ව
Recyc2	16 x 16	Ø
Sun	32 x 32	<u>کې</u>
ULS16	16 x 16	<u> </u>
ULR16	27 x 16	(Sheet 2 of 3

Graphic Objects

Name	Dimensions in dots (width x height)	Appearance	
Up	22 x 16	<u>††</u>	
Wet	17 x 16	(Sheet 3 of 3,	

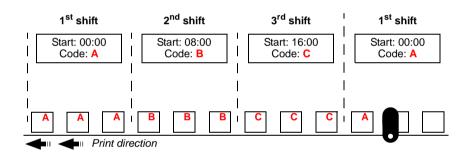
Shift Code Objects

≜⊲≣£11 → ... œ %,**2•°.**....

The shift code tool is used for creating, editing and storing a shift code object which shall be imported into messages.

What's a Shift Code?

A shift code is a looping, 24 hour sequence consisting of up to 24 periods; each period with a corresponding code of up to eight characters. Each code is only printed during its designated period. In the example below, a shift code has been set up to print the letter *A* during the first shift of the day (in this case during the first eight hours), *B* during the second shift and *C* during the third.



Creating a Shift Code Object

- **1** Follow the above path to enter the shift code tool and then select New.
- **2** Press to enter the shift code settings.
- **3** Enter the number of shifts.

In the example above this setting would be 3.

- 4 Enter the shift start time and the code which shall be printed during that shift.
- **5** Repeat the previous step for each shift period.
- 6 Press 🕒 and give the shift code a name.

Importing Into Messages

Any object can be imported into messages where it can be moved, its data edited (not graphic objects) and its appearance changed. Please see "Editing a Message" on page 13 for more information.

Deleting a Shift Code Object

See "Deleting Objects from Memory" on page 31.

Shift Code Objects

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Barcode Objects

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The barcode tool is used for creating, editing and storing a barcode object which shall be imported into messages.

Creating a Barcode Object

- **1** Follow the above path to enter the barcode tool and then select New.
- **2** Press **III** to enter the barcode settings.
- **3** Set the barcode parameters according to the following table:

Parameter	Description
Туре	Select one of the barcode types presented.
Value	Enter the characters which shall be encoded by the selected barcode type.
Height	Enter the total height in dots. This height includes the human readable characters (interpretation) if used.
Interpretation	Select whether or not the barcode shall include human reada- ble characters.

4 Press \square and give the barcode a name.

Importing Into Messages

Any object can be imported into messages where it can be moved, its data edited (not graphic objects) and its appearance changed. Please see "Editing a Message" on page 13 for more information.

Note that, when a barcode is placed in the message editor, the space that the barcode takes up and the human readable characters (if used) will be correct but the display will only show a graphical representation of the barcode bars and spaces. Of course, the barcode will be printed correctly.

Deleting a Barcode Object

See "Deleting Objects from Memory" on page 31.

Barcode Objects

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Printout Settings

Printout settings are used to make adjustments to the way messages are printed onto a print target. For example, you may want the message you are printing to take up more space on the print target. If so you would change the spacing setting. Or perhaps the new material you will be printing onto for a while is less absorbent, requiring less ink in the dots. Then you would change the dot size setting.

Caution! - Dot size and spacing are global. This means that changes made to these setting have an **immediate** affect on the way the SX-32 prints all messages. Changing the margin setting will also have an **immediate** affect but can be set for individual print heads.

Follow the above path to change the dot size setting for all printouts at all print heads.

What's Dot Size?



The dot size setting is used for changing the amount of time, in micro seconds, that the print head nozzles are open and producing dots. The longer the time, the larger the dots.

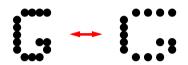
Please see the documentation received with your print heads for a recommended setting.

Changing the Spacing



Follow the above path to change the spacing setting for all printouts at all print heads.

What's Spacing?



The spacing setting is used for changing the distance between dots. The larger the value, the larger the horizontal space between dots.

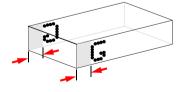
Depending on how your system has been set up, the spacing setting shall either be entered directly or a setting shall be selected from a list.



Follow the above path to change the margin setting for all printouts at individual print heads.

What's Margin?

Margin is the distance from the leading edge of the print target to the where the printout shall start. If your message is not being printed in the correct position on the print target then the margin setting needs to be changed.



Margin can be set individually for each print head.

Printout Settings

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Maintenance

To ensure problem free operation of your SX-32 printer, it is a good idea to look over your ink jet printing system at least once a day but especially before starting up. Get into the habit of asking yourself the following questions:

- Does the printout look ok?
- Is there enough ink and cleaner fluid?
- Do the print head nozzles need wiping or flushing?
- Do the cables and tubing look ok?

For maintenance instructions regarding a specific print head type or ink supply unit, please see the documentation received with the applicable unit.

Cleaning the Control Unit



Always switch the control unit off and disconnect the mains voltage cable before cleaning the control unit.



Never use excessive amounts of water or cleaner fluid. The control unit is not designed for wash down.

When necessary, gently wipe the control unit down with a cloth which has been moistened with water.

Ink can be removed using a cloth which has been moistened with any Matthews ink jet cleaner fluid (for example the cleaner fluid used with your print heads). Be especially careful around the display area.

Flushing the Print Heads

The flush function causes ALL PRINT HEADS connected to the SX-32 to spray ink at the same time.



Ink under pressure - Use protective goggles and rubber gloves when handling ink



Never clean the print head nozzles with factory (pressurised) air.

Follow the above path to flush all print head nozzles with ink or cleaner fluid. This should be done before and after a lengthy print stop and if any nozzles have become blocked.

Note that if the print heads do not support switching between ink and cleaner fluid from the control unit, this function will be disabled and the $\boxed{\bullet \circ}$ icon will be greyed out. If this is the case, you must select ink or cleaner fluid at the print heads before flushing.

Maintenance

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Appendices

Appendices

Deleting Objects from Memory

See also "Deleting Messages from Memory" on page 14.

- Objects which are in use (have been imported into one or more messages) can not be deleted from the objects library. The object must be deleted from the messages first. See "Deleting Objects from a Message" on page 13.
- Graphic objects can not be deleted from the objects library.
- The user text is deleted from all messages when its contents have been edited out. See "Editing or Deleting a User Text" on page 15.
- 1 Enter the objects library

a ⊲ an::::::

or open a new or existing message and press

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- 2 Select the object type and then the name of the object to be deleted.
- **3** Press on the keyboard.

The selected object will now be deleted from memory.

Troubleshooting Problems

- Check all cable connections before carrying out the following.
- Contact a qualified service technician if the following does not help.

General Printout Problems

This table shows the problems which are detected at the print target after printout.

Problem	Possible Cause	Remedy
No printout.	Printing stopped at control unit.	Press B so that the lamp lights green instead of red.
	Special message [Blank] selected for printout.	Select another message for printout.
	No ink / pressure.	Check the ink supply unit and print head.
Poor printout quality	Distance between print head and print target too great.	Move print head closer to target.
	Ink bottle filter clogged.	Replace filter.
	Incorrect printout setting.	See "Printout Settings" on page 27.
	Low ink pressure.	Adjust pressure at ink sup- ply unit.
	One or more print head	Clean head's front panel.
	nozzles blocked.	Flush head.
	Print head touching print target.	Adjust print head's posi- tion.
Printout should look like this MATTHEWS but looks like this	Dot size set too high in relation to spacing setting causing internal timing problem.	Set a lower dot size or a higher spacing. See "Print- out Settings" on page 27.

Appendices

Control Unit Problems

Problem	Possible Cause	Remedy
Display blank.	Display contrast low.	Press the 🚺 key.
Can't access some tools; password required.	User level set to restrict access.	Contact technician.
Display shows Fatal Error	Major internal error.	Control unit can not be used. Switch off and report fault.

Documentation History

Each Operator Manual has been written for a specific control unit software version or major hardware feature. The following table shows which manual should be used with which control unit.

Note that in no way does this table show compatibility between software versions.

Manual version number	Manual issue date (month/year)	Software version number ^(a)	Major updates in manual
1	02/06	1.0/171-2-0 and above	Note 1
2	04/06	1.0/171-2-0 and above	Note 2

Note 1: First release

Note 2: Screen language corrected on pages 17 and 19 of English issue

a. Shown at start-up and by pressing Ctrl+Shift+v.

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