# **Using Special Mode**

Your Mobile Printer has two operation modes:

- The Normal mode is used for daily operations like paper handling and printing as explained in Chapter 2, "Paper Handling," and Chapter 3, "Printing."
- The Special mode is used to change the printer settings.

The following table summarizes the purpose of each function.

**Special Mode Functions** 

Special Wrode Functions		
Function	Purpose	
Setup Mode	Change the Printer setting	
Print Configuration	Print the Printer Configuration To check your settings by printing a list of all the printer's currently selected values.	
Printing Test	Run the printing test	
Hex Dump Mode	Hex-dump allows you to determine whether the computer is sending the correct commands to the printer	
Printing Alignment Adjustment	Perform adjustment Bi-directional alignment	
Top Adjustment	Change the top-of-form fine adjustment	
Setting of The First Dot Position on The Left Side	Change the left margin fine adjustment	
Menu-Access	Restricts access to Set-Up functions from the control panel	
Setting Setup Mode to Default Value (Standard)	Resets factory settings in MACRO and INSTALL for standard	
Setting Setup Mode to Default Value (6820)	Resets factory settings in MACRO and INSTALL for 6820	

## **Entering Special Mode**

To enter Special mode:

- 1. Make sure that the tractors are loaded with continuous feedpaper and that the paper select lever is set forward.
- 2. Turn the printer off.
- 3. Turn the printer back on while pressing each buttons.

Function	Load/FF	Park	Alt	Ready/ Clear
Setup Mode				•
Print Configuration			•	
Printing Test	•			
Hex Dump Mode			•	•
Printing Alignment Adjustment	•			•
Top Adjustment		•		
Setting of The First Dot Position on The Left Side	•		•	•
Menu-Access	•	•	•	
Setting Setup Mode to Default Value (Standard)		•		•
Setting Setup Mode to Default Value (6820)		•	•	

## **Set-Up Mode Function**

The Set-Up mode allows you:

- To define a user environment, Macro, which is a printer operating environment for your application software. The printer operating environment includes the emulation, font, horizontal and vertical pitches, page length and margins, line mode, and printing direction. It also includes emulation dependent options like the character set.
- To define general installation parameters related to the integration in your environment (e.g., menu language, tear-off control, auto-load control, and interface).
- To recall all the factory settings (including the user environment and installation parameters,).
- To define what kind of settings modifications are allowed to avoid accidentally changing of Set-Up values.

Note:

You may want to use the flowchart at the end of this chapter for quick reference. The flowchart lists all printer Set-Up functions, options, and values.

## **How Set-Up Works**

The Set-Up mode consists of Set-Up functions which correspond to the printer settings described in the previous page. Each function generally has many options which correspond to the print features to be changed. Each option includes many parameters values to be selected. All the Set-Up functions, options, and values are printed in a logical sequence on the paper when you enter the Set-Up mode, including the usage of buttons. You can perform all the Set-Up operations by using buttons on the control panel in the following order:

- Navigating through the option menu structure.
- Selecting a new value for an option.
- Saving your new printer configuration (permanently or temporarily).

## **Entering the Set-Up Mode**

To enter the Set-Up mode:

- 1. Make sure that the tractors are loaded with continuous feedpaper and that the paper select lever is set forward.
- 2. Turn the printer off.
- 3. Turn the printer back on while pressing the READY button.

0		Set-Up Mode		0
0		Buttons	Set-Up Action	
	1	NEXT PREVIOUS	Move cursor Down to the next Function or Value Move cursor Up to the next Function or Value	_ 0
	•	ALT-NEXT ALT-PREVIOUS	Select the Option or Value and Move cursor Right Select the Option or Value and Move cursor Left	0
		SETUP/EXIT	Select the Option or value and Move to SAVE&EXIT	0
		<u> </u>		
		<b>2</b> <functions></functions>		0
		MACRO		$\circ$
0				
0				
0				
0				
0				$\circ$

The initial printout contains a header, help menu **1**, and <Function> menu **2**. The header tells you that the printer is in the Set-Up mode. The help menu provides a quick summary of how to use buttons in the Set-Up mode.

The <FUNCTIONS> menu 2 is started from MACRO.

Overview of the Set-Up Mode
Your Mobile Printer has five functions menu in setup mode. When you press the NEXT KEY or PREVIOUS KEY, the following next or previous <FUNCTIONS> menu is printed:

<functions> MACRO</functions>		
INSTALL		
SAFE PANEL		
RCALL-FACT		
SAVE&EXIT		

The following table summarizes the purpose of each function.

## **Set-Up Mode Functions**

Function	Purpose
MACRO	Assigns print features to MACRO
INSTALL	Changes the Set-Up menu language, computer interface, and paper feed control options
SAFE PANEL	REDY, PARK and LOAD require the ALT key to be used as a two key operation for these functions
RCALL-FACT	Resets factory settings in MACRO and INSTALL
SAVE&EXIT	Exits the Set-Up mode and saves any changes made in the Set-Up mode

To select a function from the <FUNCTIONS> menu:

- Repeatedly press the NEXT button or the PREVIOUS button to position the function you require.
- 2. Press the ALT-NEXT button or the ALT-PREVIOUS button to select the function. The printer prints the first option. The MACRO, INSTALL and SAFE PANEL functions contain options that have selectable values. The other functions have neither options nor values. Repeatedly press the NEXT button or the PREVIOUS button to position the option you require.

The first four Macro options are shown below.

```
<FUNCTIONS>
MACRO

<EMULATION>
<EMUL SERIAL>
<EMUL USB>
<EMUL WIRELESS>
```

3. Press the ALT-NEXT button or the ALT-PREVIOUS button to select the option. The printer prints the first value. Repeatedly press the NEXT button or the PREVIOUS button to position the value you require.

The EMUL WIRELESS values are shown below.

```
<FUNCTIONS>
MACRO

<EMULATION>
<EMUL SERIAL>
<EMUL USB>
<EMUL WIRELESS>

EPSON-EP2
IBM2390+
```

The current option and its values are reprinted when the ALT-PREVIOUS button is released.

## **Options with Pre-determined Values**

For some options, you can choose among a limited set of pre-determined values. To select such a value:

- 1. Repeatedly press the NEXT button or the PREVIOUS button to position the value you require.
- 2. Press the ALT-PREVIOUS button to select the value. The printer prints the current option.
- 3. After selecting the desired values, press the SETUP/EXIT button to reprint the <FUNCTIONS> SAVE&EXIT.

#### **Example: Changing the Vertical Pitch**

To become familiar with the Set-Up mode, try the following example. This example shows how to change the vertical pitch in Macro from 6 lines per inch to 8 lines per inch.

#### 1. Enter the Set-Up mode.

Turn the printer off and back on while pressing the READY button.

#### 2. Select the Macro function.

Wait for the printer to stop printing and press the ALT-NEXT button to select the Macro function and print the <EMULATION> option.

#### 3. Print the menu of the vertical pitch option.

Since you only want to change the vertical pitch, press the NEXT button repeatedly until the <VERT PITCH> option is printed. Press the ALT-NEXT button to select the <VERT PITCH> option and print its values.

#### 4. Change the vertical pitch from 6 to 8 lines per inch.

Press the NEXT button once to position the 8 LPI. Press the ALT-PREVIOUS button to select 8 LPI. The option < VERT PITCH > is printed.

#### 5. Exit the Macro function.

Since you do not want to make any other changes in MACRO, press the SETUP/EXIT button. The <FUNCTIONS> SAVE&EXIT is reprinted.

#### 6. Exit the Set-Up mode, saving the new vertical pitch.

Press the SETUP/EXIT button or the ALT-NEXT button or the ALT-PREVIOUS button to save 8 lines per inch as the new power-on default in Macro, and then exit Macro.

Press the SETUP/EXIT button again then the printer exits the Set-Up mode and returns to the Ready state. These settings remain in effect until the next time they are changed.

#### **Options with Undetermined Values**

For some options, you can choose among a continuous range of many values. These options are identified as follows

- <XXX-No of INCH>, which means the unit of the range is the Inch.
- <XXX-No of COLM>, which means the unit of the range is the Column.
- <XXX-No of LINE>, which means the unit of the range is the Line.

#### **Example: Changing the Left Margin**

This example shows how to change the left margin in Macro from column 1 to column 20.

#### 1. Enter the Set-Up mode.

Turn the printer off and back on while pressing the READY button.

#### 2. Select the Macro function.

Wait for the printer to stop printing. Then press the ALT-NEXT button to select the Macro function options.

#### 3. Print the menu of the left margin option.

Since you only want to change the left margin, press the NEXT button or the PREVIOUS button until the <LEFT MARGN> option is printed. Press the ALT-NEXT button to select the < LEFT MARGN > option and print its values.

#### 4. Change the left margin from column 1 to column 20.

Press and hold the NEXT button nineteen times. When the button is released, the new value is printed next to the current value. If the new value is not 20 COL, repeat this operation. If it is 20 COL, press the ALT-NEXT button to select 20 COL. 20 COL is underlined, and the next option value is printed.

#### 5. Exit the Macro function.

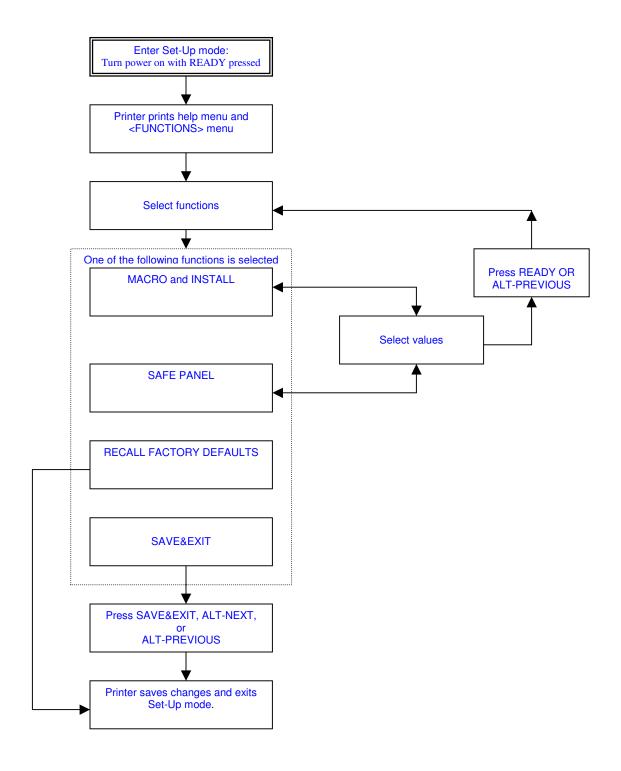
Since you do not want to make any other changes in MACRO, press the SETUP/EXIT button. The <FUNCTIONS> SAVE&EXIT menu is then reprinted.

#### 6. Exit the Set-Up mode, saving the new left margin.

Press the SETUP/EXIT button or the ALT-NEXT button or the ALT-PREVIOUS button to save 20 columns as the new power-on default in Macro and exit Macro.

Press the SETUP/EXIT button again then the printer exits the Set-Up mode and returns to the Ready state. These settings remain in effect until the next time they are changed.

The chart on the next page summarizes how to select options such as emulation and font and how to use the functions that do not have options.



#### **Points to Remember**

- We recommend that you use continuous forms paper for printing in the Set-Up mode because the output will exceed a single page. To load paper, use the FF/Load button.
- Whenever you enter the Set-Up mode, short help menus are printed at the top of the page. Use the help menus for quick reference while in the Set-Up mode.
- When printing the option for each function, you can move either forward or backward in the option list. To move forward (print the next option), press the NEXT button. To move backward (print the previous option), press the PREVIOUS button.
- While in the <FUNCTIONS> menu or when selecting a function that contains options and selectable values, press the SETUP/EXIT button to reprint the <FUNCTIONS> menu SAVE&EXIT.

### **Macro Options and Values**

- · Overprinted values are the factory settings.
- Some settings are overridden by commands from the computer.
- Options that differ by emulation are described at the end of the table.

MACRO Options	Description
<pre><emulation></emulation></pre>	Select the same emulation as that selected by your software. See step 6, "Connecting the Printer to Your Host System," in the <i>Installation Guide</i> for information on selecting an emulation.
EPSON-EP2	Epson printers using the EP2 emulation
IBM 2390+	IBM 2390+ printers
6820	6820 mode (Standard model doesn't support this functions)
PORT DEPEND	The printer selects emulation according to the active interface (such as serial, USB). See the next options.
<emul serial=""></emul>	Select an emulation for the Serial interface. This is invalid and skipped when PORT DEPEND is not selected for the <emulation> option.</emulation>
EPSON EP2	EP2 (factory setting)
IBM 2390+	IBM Proprinter 2390+ printers
6820	Not valid in Standard model
<emul usb=""></emul>	Select an emulation for USB interface. This is invalid and skipped when PORT DEPEND is not selected for the <emulation> option.</emulation>
EPSON EP2	EP2 (factory setting)
IBM 2390+	IBM Proprinter 2390+ printers
6820	Not valid in Standard model

MACRO Options	Description
<emul wireless=""></emul>	Select an emulation for the Wireless interface. This is invalid and skipped when PORT DEPEND is not selected for the <emulation> option.</emulation>
EPSON EP2	EP2 (factory setting)
IBM 2390+	IBM Proprinter 2390+ printers
6820	Not valid in Standard model
<emul bluetooth=""></emul>	Select an emulation for the Bluetooth interface. This is invalid and skipped when PORT DEPEND is not selected for the <emulation> option.</emulation>
EPSON EP2	EP2 (factory setting)
IBM 2390+	IBM Proprinter 2390+ printers
6820	Not valid in Standard model
<font></font>	Select a font to be active when the power is turned on. For fixed-spaced fonts, be sure to change the horizontal pitch as well.
DRAFT	Draft font (lower resolution than letter quality, 3 times the speed of letter quality)
COURIER	Courier font
ROMAN	ROMAN font
SANS SERIF	Sans Serif font
SCRIPT	Script font
BOLD	Bold font
GOTHIC	Gothic font
PRESTIGE	Prestige font
ORATOR	ORATOR font
OCR-A	OCR A font
OCR-B	OCR B font
<pre><horizontal pitch=""> ## CPI</horizontal></pre>	10,12, 15, 17, 20 or 24 (characters per horizontal inch)
<vertical pitch=""> ## LPI</vertical>	1,2, 3, 4, 5, <b>6</b> , 7, 8, or 12 (lines per vertical inch)
## LPCM	1, 2, or 4
	(lines per centimeter)
<form lengh=""></form>	Specify the length of the page in inches or by the number of lines per page.
## INCHES	3, 3.5, 4, 5.5, 6, 7, 8, 8.5, <b>11</b> (Letter size), 11 2/3 (A4 size), 12, 14, or 15
No of LINE	1 to 126 (66) Number of lines per page
<left margn=""></left>	Specify the left margin by the number of the left column (see "Print Area Definition" in Chapter 2, "Paper Handling.")
No of COLM	1 to 256 Number of the left column
<top form="" of=""></top>	Specify the top of form in 1/60 inches. See "Print Area

MACRO Options	Description
	Definition" in Chapter 2, "Paper Handling."
## /60 IN	<b>0</b> to 99
	Number of 1/60 inches
<ignore ff=""></ignore>	Specify whether to ignore a form feed when the current position is at the top of a form.
NO	Always perform a commanded form feed.
YES	Ignore the form feed when at the top of a form.
<top mrgin=""></top>	Specify the number of the top line. See "Print Area Definition" in Chapter 2, "Paper Handling."
## LINES	<b>1</b> to 126 ( <b>66</b> )
<bottom mrg=""></bottom>	Specify the number of the bottom line. See "Print Area Definition" in Chapter 2, "Paper Handling."
## LINES	1 to 256 (66) Number of the bottom line
<line mode=""></line>	Specify the effect of CR (Carriage Return) and LF (Line Feed) codes.
CR=CR	CR=CR: No line feed is added to a carriage return
CR=LF+CR	
LF=LF LF=LF+CR	(AB@DENGE)
LF = LF + CR	1
	CR=LF+CR: A line feed is added to each carriage return.
	ABCDEFGH <sub>O</sub>
	LF=LF: No carriage return is added to a line feed.
	ADCDEECH
	ABCDEFGH
	- TO KLIMINOP
	LF=LF+CR: A carriage return is added to each line feed.
	ABCDEFGH <sub>O</sub>
<print dir=""></print>	
UNIDIR	Unidirectional printing. Unidirectional printing is used for printing that needs precise vertical alignment. Unidirectional printing is slower than bi-directional

MACRO Options	Description
	printing.
BIDIR	Bi-directional printing. The printer prints in either direction while seeking the next print direction for a shorter print time. The unidirectional command is ignored.
SOFT CONTROL	The print direction follows a command from the
(Software Control)	computer. If no command is sent, print direction is bi- directional.
=IBM&EPSON======	The following are the Set-Up options for the IBM and EPSON emulation only.
<code page=""></code>	Selects the character set. Character sets can be used according to the selected emulation.
Code Page	<b>437</b> , 850, 860, 863, 865, 851, 852, 853, 855, 857, 866, 869, USSR GOST, 864, 437G, 920, 858, 923
=IBM DEFLTS======	The following are the Set-Up options for the IBM Proprinter 2390+ emulation only.
<ibm 1="" 2="" set=""></ibm>	Specify a character set of the IBM Proprinter 2390+.
IBM SET 1	IBM character set 1
IBM SET 2	IBM character set 2
<ibm dbl="" high=""></ibm>	Specify whether the character height is doubled. If specified, change the vertical pitch also.
NO	Standard character height
YES	Double character height
<ibm agm=""></ibm>	Specify whether the Alternate Graphics Mode (AGM) is used; in other words, is the printer compatible with the IBM Graphics printers?
NO	The base of line spacing is 1/72 inch or 1/216 inch.
YES	The base of line spacing is 1/60 inch or 1/180 inch.
=EPSON DFLTS======	The following are the Set-Up options for the Epson EP2 emulation only.
<e-chr set=""></e-chr>	Select a national character set.
USA	American English
FRANCE	French
GERMANY	German
UK	British English
DENMARK1	Danish 1
SWEDEN	Swedish
ITALY	Italian
SPAIN1	Spanish 1
JAPAN	Japanese
NORWAY	Norwegian
DENMARK2	Danish 2
SPAIN2	Spanish 2

## Using Set-Up Mode

MACRO Options	Description
LATIN AM	Latin American
< 6820 SEQ >	Select Parser control
NO	Disable 6820 control sequences
YES	Enable 6820 control sequences
< 6820 PROT >	Select Protocol mode
NO	Disable the 6820 protocol
YES	Enable the 6820 protocol

## **INSTALL Options and Values**

• Overprinted values are the factory settings.

INSTALL Options	Values	Description
<language></language>		Specify a language to be used to print the Set- Up menu functions and options.
	ENGLISH	English
	DEUTSCH	German
	ESPANOL	Spanish
	FRANCAIS	French
	ITALIANO	Italian
<tear></tear>		Specify the (auto) start timing of tear off feeding.
	AUTO 1 SEC	1 second after data stops from the computer
	AUTO 2 SEC	2 seconds after data stops from the computer
	AUTO 3 SEC	3 seconds after data stops from the computer
	AUTO 4 SEC	4 seconds after data stops from the computer
	AUTO 5 SEC	5 seconds after data stops from the computer
	MANUAL	Feed the paper for tear-off when the READY button is pressed changing to pause mode.
	NO TEAR	Tear off feeding is inhibited under any conditions.
<s-sheet ld=""></s-sheet>		Specify the (auto) start timing of single sheet loading.
	AUTO 1 SEC	1 second after a single sheet is set on the platen
	AUTO 2 SEC	2 seconds after a single sheet is set on the platen
	AUTO 3 SEC	3 seconds after a single sheet is set on the platen
	AUTO 4 SEC	4 seconds after a single sheet is set on the platen
	AUTO 5 SEC	5 seconds after a single sheet is set on the platen
	MANUAL	Load a single sheet when the FF/Load button is pressed.
<buffer></buffer>		Assign buffer memory as the input buffer.
	2 KBYTE	2K bytes
	8 KBYTE	8K bytes
	16 KBYTE	16K bytes
	32 KBYTE	32K bytes
	64 KBYTE	64K bytes

INSTALL Options	Values	Description
		Note:
		The larger the input buffer selected, the smaller the download buffer becomes. Even with 64K bytes of input buffer, a minimal download buffer is provided. If you need a larger capacity for downloading fonts, reduce the input buffer.
<i f="" type=""></i>		Select the type of interface to the computer.
	<b>AUTO</b> SERIAL	Both interfaces are ready for communication. The printer communicates with the interface from which it first receives data. The interface is active until the input buffer becomes empty. RS-232 Serial interface
	USB	USB interface
	WIRELESS	Wireless interface
	BLUETOOTH	Bluetooth interface
<baud rate=""></baud>	Bablooin	The baud rate is in bps (bits per second). Select the same baud rate as that used by your computer or modem.
	4800 BPS	4800 Bits Per Second
	9600 BPS	9600 Bits Per Second
	19200 BPS	19200 Bits Per Second
	38400 BPS	38400 Bits Per Second
<parity></parity>		Parity setting Select the same word parity setting that is used by your computer or modem.
	NONE	None causes transmission in both directions without parity bit
	ODD	The bytes are checked to ensure they have odd parity.
	EVEN	The bytes are checked to ensure they have even parity.
<data bit=""></data>		Word Length setting Select the same word length setting that is used by your computer or modem.
	8 BIT	8 Data bits per data byte
	7 BIT	7 Data bits per data byte
<stop bit=""></stop>		Word Length setting
		Select the same word length setting that is used by your computer or modem.
	1 BIT	1 Stop bit per data byte
	2 BIT	2 Stop bits per data byte
<buffer ctl=""></buffer>		The ready/busy control method.
	DTR	Hardware control via the DTR lead.
	XON/XOFF	Data control using DC1 and DC3 control

INSTALL Options	Values	Description
		characters.
	6820 PROT	For 6820 emulation
<disc fault=""></disc>		Disconnect on a fault condition
	NO	Do not disconnect.
	DROP DTR	DTR will change to inactive state.
	PULSE DTR	DTR will pulse to inactive and then back to the normal active state.
<pwrdntime></pwrdntime>		Sets time for idle power down action
	0	Disables idle power down timeout
	1-96	Hours to turn off power

#### Safe Panel

- If the value of safe panel is "YES", READY, PARK and LOAD require the ALT key
  to be used as a two key operation for these functions in Normal Operation Mode of
  printer.
- If the value of safe panel is "NO", READY, PARK and LOAD key are operated as Normal Operation Mode, ALT key is not required.

## **Recalling Factory Settings**

Factory settings are those settings pre-selected at the factory. To recall (reset) the factory settings, select the RCALL-FACT function and press the ALT-NEXT button or the ALT-PREVIOUS button.

Options under the MACRO, INSTALL, and ADJUST functions are all initialized to the factory settings.

## **Exiting and Saving**

This section describes how to exit the Set-Up mode while saving any changes you have made.

To exit the Set-Up mode with the settings saved, first select the SAVE&EXIT function and then press the ALT-NEXT button or the ALT-PREVIOUS button.

Any settings changed while in the Set-Up mode are saved as the new power-on defaults for the printer. The new defaults remain active until you change them again.

## **Using the Diagnostic Functions**

## **Print Configuration Function**

This function prints a list of all the printer's currently selected values. This function is useful for checking the printer settings when you first enter the Set-Up mode or just before you exit.

#### 1. To enter the Printer Configuration mode:

- 1) Make sure that the tractors are loaded with continuous feedpaper and that the paper select lever is set forward.
- 2) Turn the printer off.
- 3) Turn the printer back on while pressing the ALT button.
- 2. The printer starts to print a list of the currently selected values. The pre-selected factory settings are shown on the opposite page.
- 3. To exit the Printer Configuration mode:

After the printer finishes printing the list of values, press the SETUP/EXIT button

## Printer Configuration

				А

F/W Version V1.00 IPL Version V1.03 CG Version V1.01

## $1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9 \ 0 \ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9 \ 0 \ 1 \ 2 \ 3 \ 4$

MA	CRO		<u>INSTALL</u>
Options Val	ue	Options	Value
EMULATION	EPSON-EP2	LANGUAGE	ENGLISH
<b>EMUL SERIAL</b>	EPSON-EP2	TEAR	AUTO 1
EMUL USB	EPSON-EP2	SEC	
EMUL WIRELESS	EPSON-EP2	S-SHEET LD	AUTO 1
EMUL BLUETOOT	H EPSON-EP2	SEC	
FONT	DRAFT	BUFFER	64
HORZ PITCH	10 CPI	KBYTE	
VERT PITCH	6 LPI	I/F TYPE	AUTO
FORM LENGTH	11	<b>BAUD RATE</b>	9600 BPS
INCHES		PARITY	
LEFT MARGN	1 COL	NONE	
TOP OF FORM	0 /60 IN	DATA BIT	8 BIT
IGNORE FF	YES	STOP BIT	1
TOP MARGIN	1 LINES	<b>BUFFER CTL</b>	DTR
BOTTOM MARGIN	66 LINES	DISC FAULT	NO
CR CODE	CR=CR	<b>PWRDWNHRS</b>	16
LF CODE	LF=LF+CR	HOUR(S)	
PRINT DIR	SOFT CONTRL		
			SAFE PANEL
<ib< td=""><td>M&amp;EPSON&gt;</td><td>Options</td><td>Value</td></ib<>	M&EPSON>	Options	Value
CODE PAGE	CP 437		
		SAFE PANEL	NO
	M DEFLTS>		
I-SET 1/2	IBM SET 1		MENU-ACCES
I-DBL HIGH	NO	Options	Value
IBM AGM	NO		
		MENII ACCES	ALL ELING
	SON DEFLTS>		
E-CHR SET	USA		

## **Printing Test Function**

The printing test function prints test pages independently of your computer to check printing operations and quality. It does not check the interface between the computer and the printer.

The printing test prints all of the characters available in the ASCII character set.

#### 1. To enter the Printing Test mode:

- 1) Make sure that the tractors are loaded with continuous feedpaper and that the paper select lever is set forward.
- 2) Turn the printer off.
- 3) Turn the printer back on while pressing the "LOAD/FF" button.

**Note:** Do not press any buttons alone or in combination except for pressing the LOAD button alone when turning the printer on, to avoid initiating unexpected tests not permitted for the user.

#### 2. The printer starts to print rolling ASCII data as shown below.

#### 3. To exit the Printer Configuration mode:

Printing Test mode is continues until power OFF.

```
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\
"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]
#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^
$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_
%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_
&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`a
'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`ab
()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abc
)*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcd
 !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\
"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPORSTUVWXYZ[\]
#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^
$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_
%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_
&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`a
```

## **Hex Dump Mode**

The Hex Dump mode prints data and commands in hexadecimal characters and abbreviated control codes. The ASCII characters are used for printing. No characters are printed for hexadecimal codes 80 to FF. The Hex Dump mode is useful for checking whether your computer is sending the correct commands to the printer and whether the printer is executing the commands correctly. It is also useful for debugging software programs.

#### 1. To enter the Printing Test mode:

- 1) Make sure that the tractors are loaded with continuous feedpaper and that the paper select lever is set forward.
- 2) Turn the printer off.
- 3) Turn the printer back on while pressing the "READY/CLEAR" + "ALT" buttons.

Note: Do not press any buttons alone or in combination except for pressing the READY and ALT buttons alone when turning the printer on, to avoid initiating unexpected tests not permitted for the user.

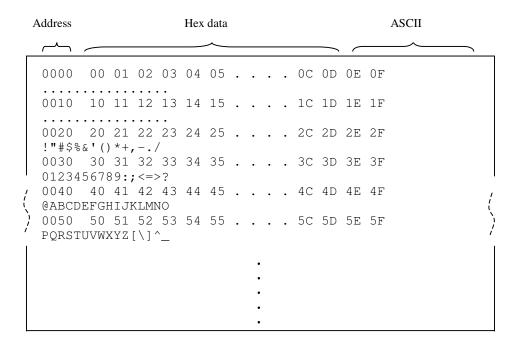
#### 2. Print the Hex Dump.

- 1) To start Hex Dump printing, send your file or program to the printer. The printer goes online and prints the Hex Dump.
- 2) Press the READY button to pause and resume printing in Hex Dump mode. To resume Hex Dump printing, press the READY button again.
- 3) To print another Hex Dump, send another file to the printer.

#### 3. Exit the Hex Dump mode

Turn the printer off to exit the Hex Dump mode.

### 4. Sample of Hex Dump printing format



## **Printing Alignment Adjustment**

This function performs adjustment Bi-directional alignment.

In bidirectional printing, characters are printed from left to right tend to misalign with characters printed from right to left as shown below:

The vertical alignment function corrects the vertical character displacement that sometimes occurs with bidirectional printing and results in a poor appearance especially in printing tables. This function is defined as one of the power-on initiated test functions. If you notice misaligned printing, start this function to check and correct the vertical print alignment.

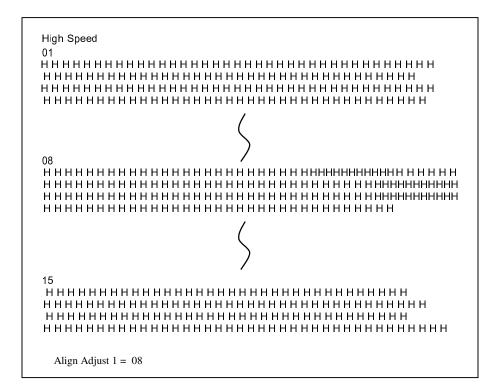
### 1. To enter the Printing Alignment Adjustment Function:

- 1) Make sure that the tractors are loaded with continuous feedpaper and that the paper select lever is set forward.
- 2) Turn the printer off.
- 3) Turn the printer back on while pressing the "READY/CLEAR" + "LOAD/FF" buttons.

**Note:** Do not press any buttons alone or in combination except for pressing the READY and LOAD buttons alone when turning the printer on, to avoid initiating unexpected tests not permitted for the user.

#### 2. Adjust the vertical print alignment at High Speed.

After Paper is loaded, the format of adjustment for Bi-directional Alignment of High Speed is printed and the paper will automatically advance for viewing after the printing is complete. The message of "Bi-Dir Align Adjust1 = xx" is printed.

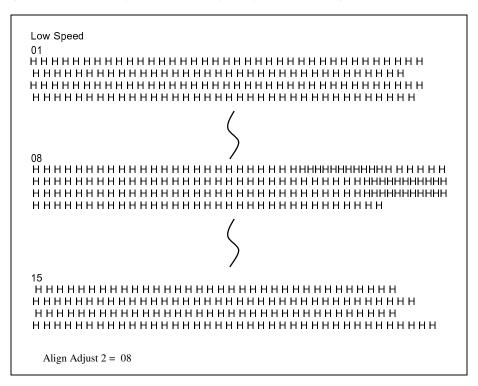


An adjustment value is chosen by NEXT and PREVIOUS Key. The adjustment range is "01-15", and the center value is "08". By pressing SETUP/EXIT Key, the adjustment value for High Speed is determined and the adjustment value for High Speed is saved.

### 3. Adjust the vertical print alignment at Low Speed.

Adjustment Bi-directional Alignment for Low Speed is performed immediately, after the adjustment value for High Speed is saved.

After Paper is loaded, the format of adjustment for Bi-directional Alignment of Low Speed is printed and the paper will automatically advance for viewing after the printing is complete. The message of "Bi-Dir Align Adjust 2 = xx" is printed.



An adjustment value is chosen by NEXT and PREVIOUS Keys. The adjustment range is "01-15", and the center value is "08". By pressing SETUP/EXIT Key, the adjustment value for High Speed is determined and the adjustment value for Low Speed is saved.

#### 4. Printing new settings of alignment and Exit the vertical alignment function.

Press the SETUP/EXIT button to save the new vertical alignment settings. The new adjustment values of Bi-directional Alignment are printed after both High Speed and Low Speed are saved; the paper is automatically advanced for viewing after the printing is completed, then exit the vertical alignment function.

```
Align Adjust 1 = xx
Align Adjust 2 = xx
```

Note:	To exit the vertical alignment function without saving changes, turn the printer
	off.

### **Top Adjustment Function**

Print positions often change gradually when you use the printer over long periods of time. The ADJUST function allows you to adjust these positions by fine-tuning the Top-of-Form origin.

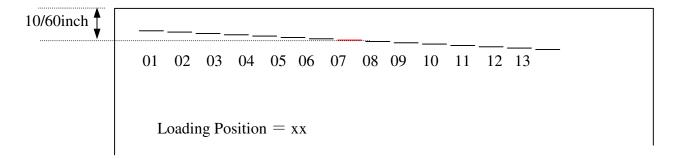
#### 1. To enter Top Adjustment Function:

- 1) Make sure that the tractors are loaded with continuous feedpaper and that the paper select lever is set forward.
- 2) Turn the printer off.
- 3) Turn the printer back on while pressing the "PARK" buttons.

Note:	Do not press any buttons alone or in combination except for pressing the
MOLE.	bo not press any buttons alone of in combination except for pressing the
	PARK button alone when turning the printer on, to avoid initiating
	unexpected tests not permitted for the user.

#### 2. To set Top Adjustment value:

1) The format of adjustment Loading Position is printed as below, 15 patterns of adjustment Loading Position are printed.



- 2) The format of Loading Position is printed and the paper is automatically advanced for viewing after the printing is complete. The message of "Loading Position Pos = xx" is printed.
- 3) Press NEXT and PREVIOUS Key to choose the new top position. The adjustment range is "01-15", and the center value is "08".

It is possible to adjust different values for Tractor and Manual

#### 3. Printing new value

By pressing SETUP/EXIT Key, the adjustment value for Loading Position is determined and the adjustment value for Loading Position is saved.

The new adjustment values of Loading Position is printed. The paper is automatically advanced for viewing after the printing is complete. After ejecting a paper, the message" Loading Position = xx" is printed.

```
Loading Position = xx
...
Loading Position = yy
Note) "yy" is New adjustment value
```

## 4. Exit the Top Adjustment mode

Turn the printer off to exit the Top Adjustment mode.

## **Setting of The First Dot Position on The Left Side Function**

Print positions often change gradually when you use the printer over long periods of time. This ADJUST function allows you to adjust these positions by fine-tuning the Left Margin origin.

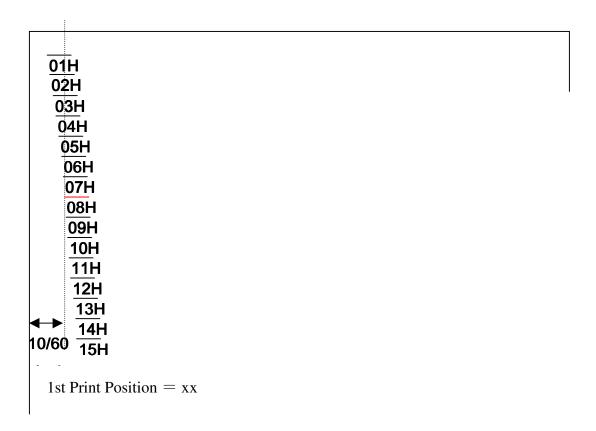
#### 1. To enter Adjustment Function:

- 1) Make sure that the tractors are loaded with continuous feedpaper and that the paper select lever is set forward.
- 2) Turn the printer off.
- 3) Turn the printer back on while pressing the "READY/CLEAR" + "ALT" + "LOAD/FF" buttons.

Note: Do not press any buttons alone or in combination except for pressing the "READY/CLEAR" + "ALT" + "LOAD/FF" buttons alone when turning the printer on, to avoid initiating unexpected tests not permitted for the user.

#### 2. To set Adjustment value:

1) The format of adjustment of setting of the first dot Position on the left side is printed as below, 15 patterns of adjustment Position are printed.



- 2) After the format of setting of the first dot Position on the left side is printed, the paper is automatically advanced for viewing after the printing is complete. The message of "1st Print Position Pos = xx" is printed.
- 3) Press NEXT and PREVIOUS Key to choose the new first dot position on the left side. The adjustment range is "01-15", and the center value is "08".

It is possible to adjust different values for Tractor and Manual

#### 3. Printing new value

By pressing SETUP/EXIT Key, the adjustment value for the first dot position on the left side is determined and the adjustment value is saved.

The new adjustment value of the first dot position on the left side is printed. The paper is automatically advanced for viewing after the printing is complete. After ejecting a paper, the message" 1<sup>st</sup> Print Position = xx" is printed.

```
1<sup>st</sup> Print Position = xx
...
...
1<sup>st</sup> Print Position = yy
Note) "yy" is New adjustment value
```

#### 4. Exit the setting of the first dot position on the left side mode

Turn the printer off to exit this mode.

## **Changing Menu Access Options**

You can restrict the access to the Set-Up functions to avoid accidentally changing the Set-Up options.

### **MENU ACCESS Option and Values**

· Overprinted values are the factory settings.

MENU ACCESS Options	Values	Description
<menu-acces></menu-acces>		Specify the type of access to the Set-Up functions from the control panel or from the <functions> menu.</functions>
	ALL FUNC	All functions are accessible.
	MACRO ONLY	Only MACRO functions are accessible from the <functions> menu.</functions>
	NO ACCESS	Set-Up mode is inaccessible.
	SAFE PANEL	READY, PARK and LOAD require the ALT key to be used as a two key operation for these functions.
		Note:
		You can return to the All Functions
		Accessible mode by turning the printer on while pressing the ALT, PARK and LOAD buttons at the same time. The printer enters
		the Set-Up mode with this operation.

#### 1. To enter Menu Access mode:

- 1) Make sure that the tractors are loaded with continuous feedpaper and that the paper select lever is set forward.
- 2) Turn the printer off.
- 3) Turn the printer back on while pressing the "LOAD/FF" + "PARK" + "ALT" buttons.

Note:	Do not press any buttons alone or in combination except for pressing the
	LOAD, PARK and ALT buttons alone when turning the printer on, to avoid
	initiating unexpected tests not permitted for the user.

#### 2. To change Menu Access Option and values

- 1) Press the NEXT( LOAD/FF) button to move to next option;
- 2) Press the PREVIOUS( PARK) button to move to previous option;
- 3) Press the ALT-NEXT buttons to select the Option or value and move down;
- 4) Press the ALT-PREVIOUS buttons to select the Option or value and move up;
- 5) Press SETUP/EXIT key to save the value and move to SAVE&EXIT menu;

## 3. Exit the Menu Access mode

Turn the printer off to exit the Menu Access mode.

## **Setting Setup Mode to Default Value (Standard)**

This function can initialize the printer to Standard default.

#### 1. To enter setting setup mode to default value(standard):

- 1) Turn the printer off.
- 2) Turn the printer back on while pressing the "PARK" + "READY/CLEAR" buttons.

Note:	Do not press any buttons alone or in combination except for pressing the
	PARK and READY/CLEAR buttons alone when turning the printer on, to
	avoid initiating unexpected tests not permitted for the user.

#### 2. Exit the setting setup mode to default value(standard):

After the setting completes, the printer will automatically restart in the power-up state.

## **Setting Setup Mode to Default Value (6820 Mode)**

This function can initialize the printer to 6820 mode default.

#### 1. To enter setting setup mode to default value(6820 mode):

- 1) Turn the printer off.
- 2) Turn the printer back on while pressing the "PARK" + "ALT" buttons.

Note:	Do not press any buttons alone or in combination except for pressing the
	PARK and ALT buttons alone when turning the printer on, to avoid initiating
	unexpected tests not permitted for the user.

#### 2. Exit the setting setup mode to default value(6820 mode):

After the setting completes, the printer will automatically restart in the power-up state.

## Set-Up Mode Quick Reference

The following flowchart shows how the Set-Up mode is organized.

Note: Asterisks (\*) indicate factory settings.

