

EZ-LABEL PRINTER

KL-2000

Owner's Manual

No contractual terms which may be contained in this booklet shall apply to products supplied through RS. All orders accepted by RS are accepted subject to the Conditions of Sale and (where applicable) the Servicing Conditions contained in the current RS catalogue.



CASIO®

**GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THE UNIT
IN THE U.S.A. (not applicable to other areas).**

WARNING: This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate the equipment with respect to the receiver
- move the equipment away from the receiver
- plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems"

This booklet is available from the US Government Printing Office, Washington D.C., 20402, Stock No.004-000-00345-4.

CASIO COMPUTER CO., LTD.

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Shinjuku-ku, Tokyo 163, Japan

Introduction

Congratulations on your selection of the CASIO KL-2000 Label Printer. The CASIO Label Printer makes it possible for you to print adhesive labels for a wide variety of applications, such as:

- Name tags
- Scrapbook and photo album labels
- Cassette tape labels

You can produce attractive original labels thanks to such features as:

- Two different tape sizes (9 mm and 18 mm)
- Three fonts (serif, sans-serif, italic)
- Four character styles (normal, boldface, frame, shadow)
- Various other font effects (shade, underline, box)
- Illustrations
- User characters

You can even store text in memory and receive data from a CASIO SF Unit or B.O.S.S. (in this manual referred to as an "SF Unit").

All of this makes the CASIO Label Printer the perfect tool for just about any of your labeling needs!

Important

- Contact a nearby dealer when you require servicing.
- Note that the manufacturer shall not be held liable for any loss or claims by third parties which may arise out of the use of this unit.
- Note that the manufacturer shall not be held liable for any damages incurred as a result of data loss caused by malfunctions, repairs, or interruption of power supply.
- It is up to the user to keep backup records of important data.



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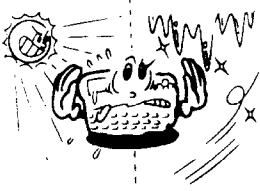
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Part 1

Getting acquainted

This part of the manual provides you with important information you need to know to use the Label Printer to its full potential. Be sure to read it carefully before using the Label Printer for the first time.

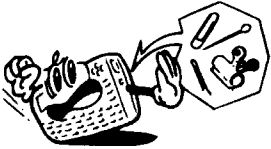
1-1 Important precautions



Keep your Label Printer out of direct sunlight and away from moisture, and avoid temperature extremes. The recommended temperature range is 10°C to 35°C (50°F to 95°F).



Don't let coffee, juice or other liquids splash onto the Label Printer.



Never let paper clips, pins or other foreign objects get into the tape outlet slot or printer of the Label Printer.



Don't pile heavy objects on top of the Label Printer.



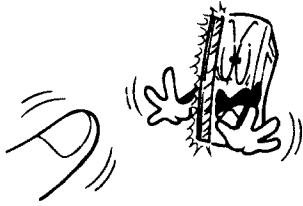
Never try to take the Label Printer apart or attempt your own maintenance.



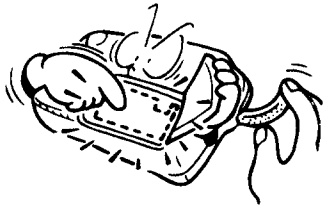
Don't drop your Label Printer and avoid strong bumps or shocks.



Do not pull on the tape or try to force it back into the Label Printer.



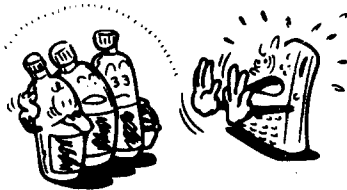
The yellow cutter cartridge inside the Label Printer contains a sharp blade for cutting the printed tape. Keep your fingers away from this cartridge and be especially careful to keep the cartridge away from small children.



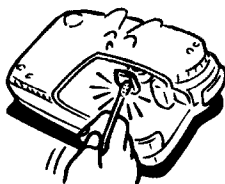
Do not operate the cutter lever without an ink ribbon/tape cassette loaded in the Label Printer. Doing so can damage the cutter blade.



Do not apply excessive force to the tape cutter lever. Doing so can damage the Label Printer.



Do not use benzine, thinner, or other volatile chemicals to clean the exterior of the Label Printer. Use a soft, dry cloth or a cloth dampened in a weak solution of a mild, neutral detergent and water. Wring the cloth out until all excess moisture is removed.



A dirty printer head can cause printing to become smudged. When this happens, clean off the printer head by wiping it with a cotton swab moistened with alcohol (page 68).



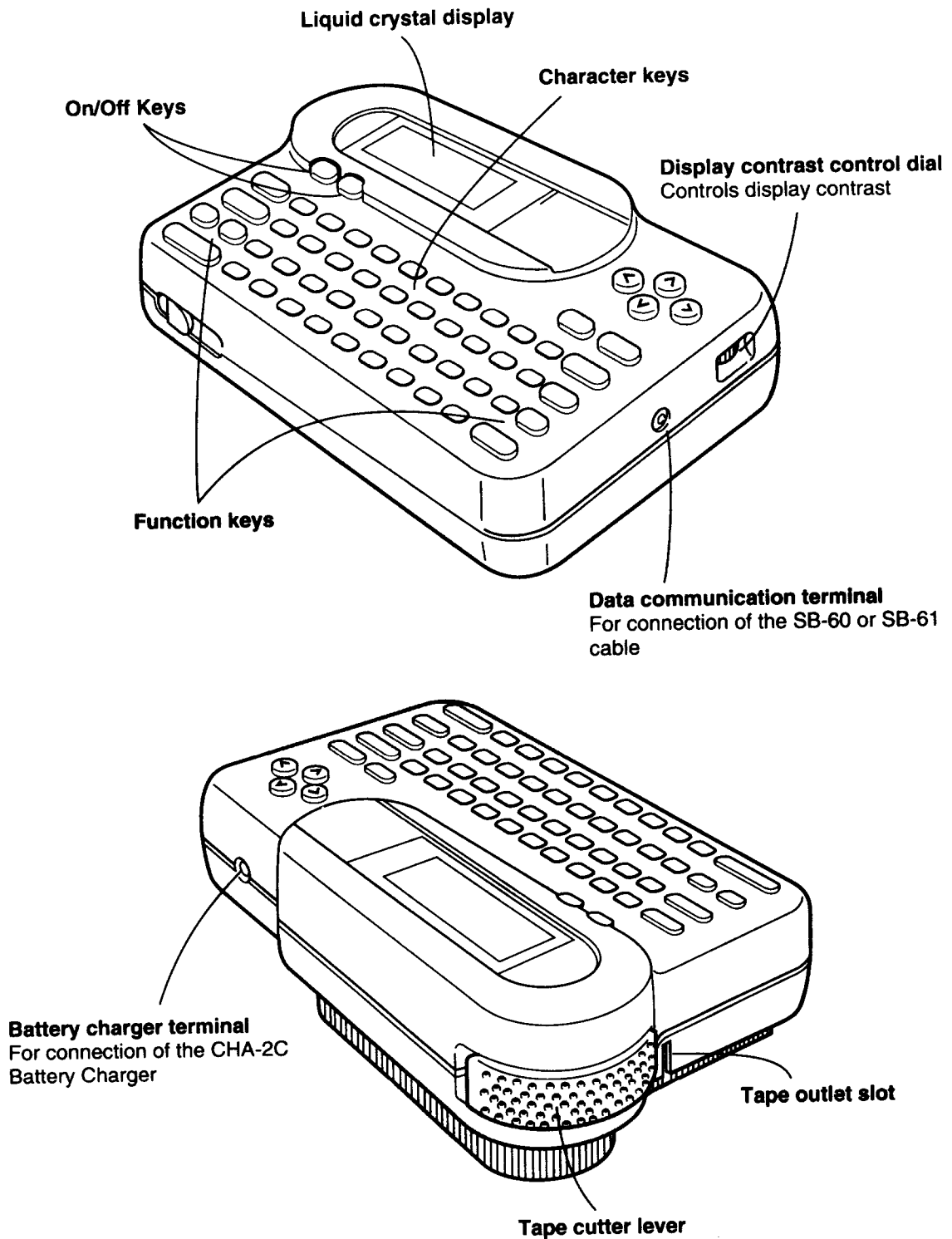
Never touch the printer head with your finger.



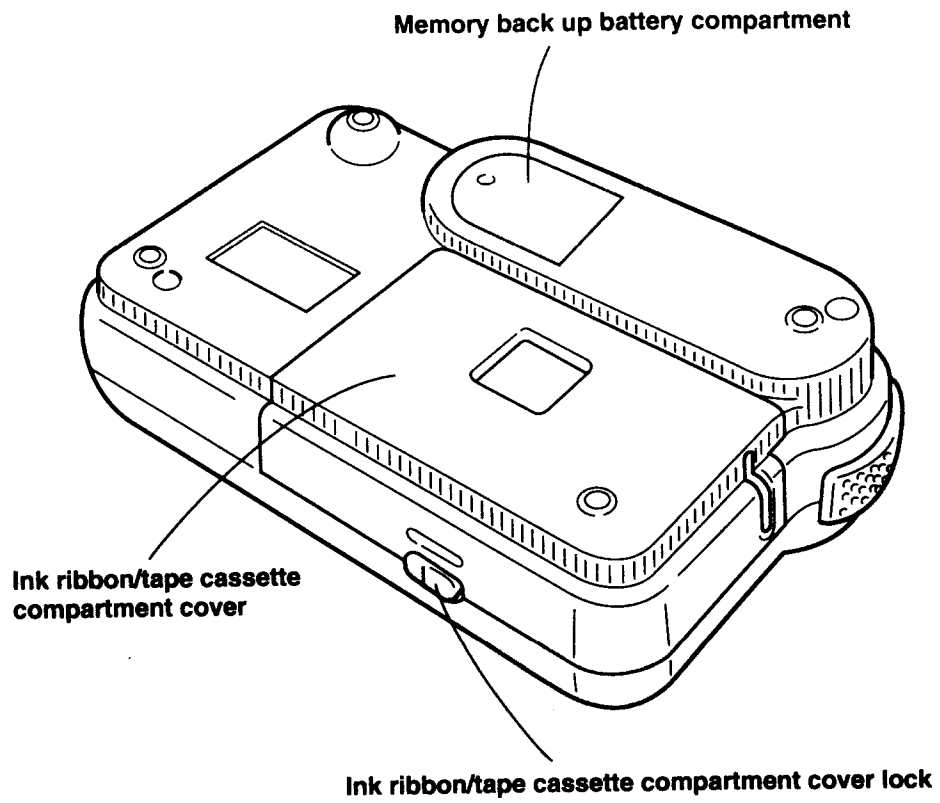
If you use your Label Printer next to a television or radio, it may interfere with reception.

1-2 General Guide

Front



Back



Part 2

Getting ready

This part of the manual tells you about how to load batteries and the ink ribbon/tape cassette, and how to perform other basic set ups for the Label Printer.

Important

Be sure to read this section before attempting to use the Label Printer!

2-1 About the power supply...

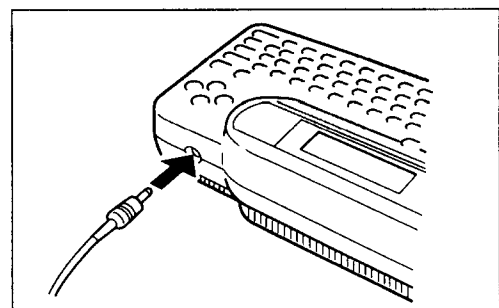
The Label Printer has two power supplies, a main power supply and a memory back up power supply. The main power supply is for normal operations and consists of a rechargeable battery pack. The memory back up power supply consists of a single CR2032 lithium battery, which you must replace at least once a year (page 66).

2-2 When to recharge the main power supply...

- Before using the Label Printer for the first time or after you have not used it for a long time.
- Whenever the message "LOW BATTERY!" or "PLEASE CHARGE A BATTERY!" appears on the display of the Label Printer.
- When nothing happens (no indicators or symbols appear on the display) when you switch the Label Printer on. In this case you should also reset the memory (page 78).
- Every two months, in order to ensure maximum battery performance.
- At least once a year in order to prevent damage to the Label Printer caused by leaking of the battery fluid.

To recharge the main power supply

1. Switch off the power of the Label Printer.
 - The CHA-2C charger is not an AC adaptor, so it cannot directly power Label Printer operation.
 - The battery will not charge while the power of the Label Printer is on.
2. Plug the CHA-2C charger that comes with the Label Printer into a standard household AC outlet.
 - Use the correct charger type — CHA-2C. Other chargers can damage the Label Printer.
 - Make sure that the power rating of the charger matches that of your local power supply. If it isn't, contact your dealer before trying to use the Label Printer.
 - You can damage your Label Printer by using the wrong type of adaptor.
3. Connect the charger to the battery charger terminal of the Label Printer.
 - Charging starts at this time, and a full charge is achieved in about 10 hours.
 - Overcharging for more than 10 hours will shorten the service life of the battery.



4. After charging is complete, ensure that the Label Printer is switched off and then unplug the charger from the Label Printer *first*.
 - Do not leave the charger connected to the Label Printer for long periods.
5. Unplug the charger from the AC outlet.
 - Do not leave the charger connected to the AC outlet for long periods.

Important

- You may have problems achieving a full charge after allowing the battery to run all the way down. See page 79 for instructions on how to achieve maximum battery performance.
- The optimum temperature range during charging is 10°C to 35°C (50°F to 95°F). Very low temperatures or exposure to direct sunlight can damage the battery or cause them to leak.
- Normally you should be able to charge battery more than 300 times. If you are not getting enough service from a single charge, you may need new battery. Take your Label Printer to your nearest authorized CASIO dealer and request replacement of battery.

2-3 Switching on power for the first time

Use the following procedure to switch on power and reset the Label Printer when you use it for the first time. Note that this procedure also resets the memory to its initial settings (page 79).

To switch on power for the first time

1. While holding down **BS**, **SET**, and **ESC**, press **ON** to switch power on.

INITIALIZE
MEMORIES?

YES = SET / NO = ESC

2. Press **SET** to initialize the Label Printer or **ESC** to abort the operation without initializing anything.
If you press **SET**, the following initial reset screen appears. See page 79 for a table of initial reset settings.

▲ ▲ ───

0 1 x 1 0 . 0 c m

• • • • • • • • • •

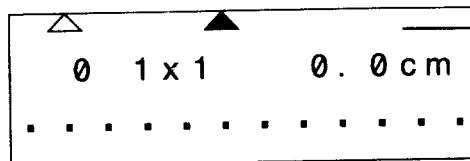
- These and other indicators will be explained in detail as they come up in the manual.
 - For details on the initial settings for the Label Printer following the reset operation, see page 79.
3. To switch power off, press **OFF**.

2-4 Switching power on and off without resetting the Label Printer

Use the following operations to switch power on and off without resetting the Label Printer. This is the on/off operation you should normally use.

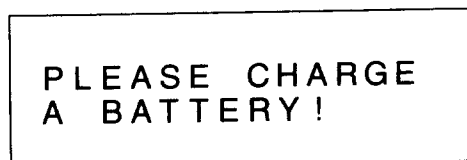
To switch power on and off

1. Press **ON** to switch power on and display the initial power-on screen. See page 20 for an explanation of the display, and page 79 for a table of initial power-on screen default settings.



Important

If the following message appears when you switch power on, use the procedures described on page 12 to recharge battery as soon as possible.



2. If you want to recall the characters that were displayed and the settings that were in effect when you last switched power off, press **SET**.
 - Note that you can recall text by pressing **SET** immediately after switching on power only. If you input text or perform other operations, pressing **SET** will not recall text.
3. After you finish using the Label Printer, press **OFF** to switch power off.

2-5 About the Auto Power Off function...

If you do not perform any key operation for about six minutes, the Label Printer automatically switches power off. To restore power, press **ON**.

2-6 Loading an ink ribbon/tape cassette

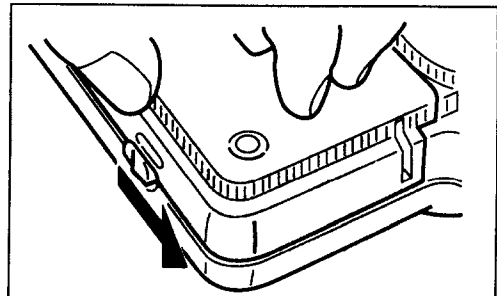
Use the following procedure to load an ink ribbon/tape cassette for printing into the Label Printer.

Important

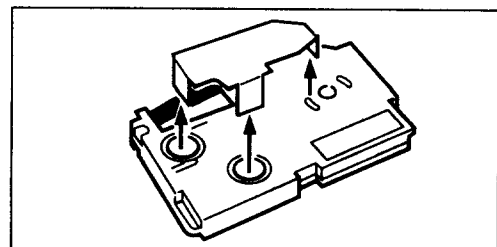
- Never try to pull the tape out of the cassette. Doing so can cause the ink ribbon to break.
- Never try to push the tape back into the cassette. Once tape is out of the cassette, there is no way to wind it back in. Trying to do so can cause operational problems with the Label Printer.
- Always make sure that Label Printer power is switched off before you replace the ink ribbon/tape cassette.

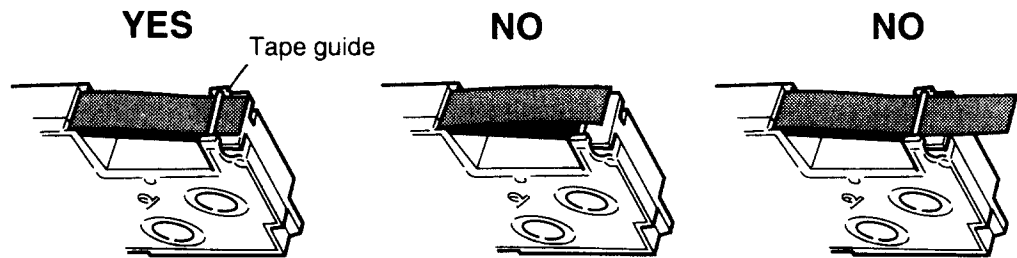
To load an ink ribbon/tape cassette

1. Make sure that the power of the Label Printer is switched off.
2. While pressing down gently on the ink ribbon/tape cassette compartment cover, slide the cover's lock to the OPEN position.



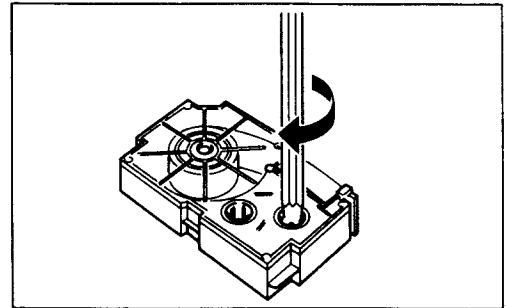
3. Remove the stopper from a new ink ribbon/tape cassette and check to see that the tape is ready to use.
 - Make sure that the tape is under the tape guide and that it is not bent or twisted.
 - Make sure that the tape does not extend too far past the tape guide. If it does, cut off the end with a pair of scissors.



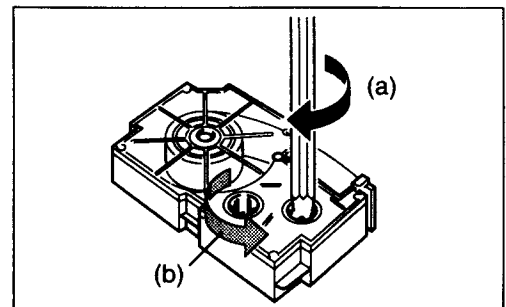


4. Use a pencil or some other thin object to take up slack in the ink ribbon as shown in the illustration. Note that the tape does not move at this time.

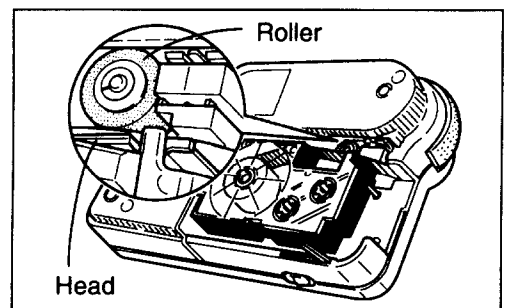
- If the ink ribbon is slack when you load it into the Label Printer, it can break or cause some other problem.



- Be sure to turn the ink ribbon take up spool only in the direction indicated by the arrow (a).
- Turn the spool until another spool starts turning in the direction (b). It indicates there is no slack in the ribbon.



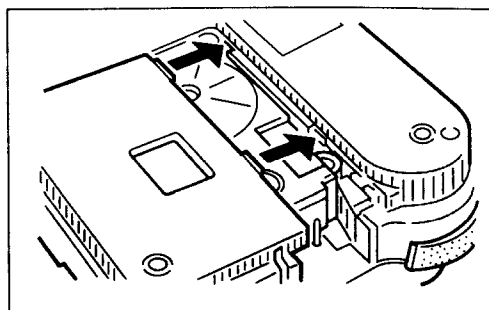
5. Load the ink ribbon/tape cassette into the Label Printer, making sure that the tape and ink ribbon pass between the head and roller.



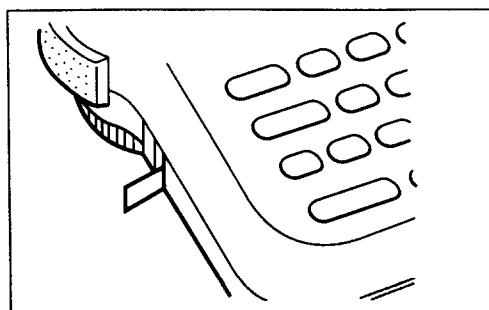
Warning!

Be careful of the yellow cutter cartridge. It contains a sharp blade and can injure your fingers if you are careless.

6. Replace the ink ribbon/tape cassette compartment cover by inserting the tabs on the edge of the cover into the slots provided on the Label Printer.



7. Switch on Label Printer power and press **FEED** two or three times to make sure that the tape comes out without any problem.
 - If the tape does not come out normally, switch off power and start again from step 1 above.



2-7 Switching the beep tone off

The Label Printer is designed to emit a beep whenever an illegal operation is attempted. You can switch the beep tone off using the following procedure.

To switch the beep tones off

Hold down **ESC** and switch power on. No beep tones will sound while you are using the Label Printer. This setting remains in effect until you switch power off again. This means that you must switch the beep tones off (by holding down **ESC** as you switch power on) each time you switch power on.

2-8 Setting the message language and unit of measurement

The following procedure lets you select English, German, French or Spanish as the language to use for display messages. You can also specify whether to use inches or centimeters as the unit for the tape length value shown on the display.

To set the message language and unit of measurement

1. While holding down **E**, switch on Label Printer power.
 - The highlighted language is the one that is currently selected.
 - You can skip any of the steps in the following procedure by pressing **ESC**.



A rectangular box containing four lines of text. The first line, 'ENGLISH', is highlighted with a black background. The other lines are 'DEUTSCH', 'FRANÇAIS', and 'ESPAÑOL'.

2. Use the \wedge and \vee cursor keys to move the highlighting up and down until the language you want to use is selected.
3. When the language you want is selected (highlighted), press **SET**.
 - The highlighted unit of measurement is the one that is currently selected.



A rectangular box containing two lines of text. The first line, 'cm', is highlighted with a black background. The second line is 'inch'.

4. Use the \wedge and \vee cursor keys to move the highlighting up and down until the unit you want to use is selected.
5. When the unit you want is selected (highlighted), press **SET** to complete the procedure and return to the initial power-on screen (page 14).

Part 3

Inputting characters, symbols and graphics

This part of the manual tells you how to input characters. To make things easier to understand, we call everything you input a *character*, regardless of whether it is actually a letter, number, symbol or graphic. Explanations here all use the default settings that are in effect from the initial power-on screen.

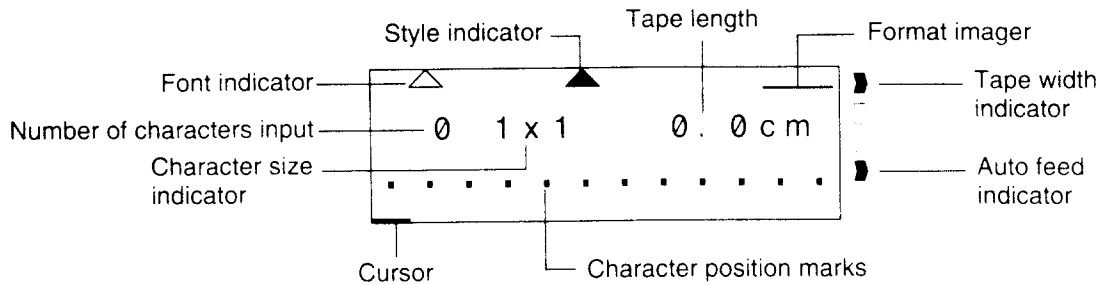
Note that you can also create and use your own characters and graphics using the procedures described on page 46. For information on using other fonts, styles, effects and character sizes, see page 31.

Important

You can input up to 127 characters. Further character input becomes impossible after you input the 127th character.

3-1 About the display symbols and indicators

Before we get into actual input, you should first become acquainted with the symbols and indicators used on the Label Printer display. Switch power on and the initial power-on screen appears.



The following explains what each of these indicators means.

- **Font indicator**

This indicator shows the font that is currently in use. You can select serif, sans-serif, or italic. The default setting when you switch power on is serif.

- **Style indicator**

This indicator shows the character style that is currently in use. You can select normal, boldface, frame or shadow. The default setting when you switch power on is normal.

- **Format imager**

This is a graphic indication of how your characters will appear when printed. The display of the Label Printer shows all characters in a single line, with line changes indicated by a newline symbol ¶. The format imager gives you an idea of the printout format as follows.



If your input exceeds the maximum number of allowable lines, the message “ERR” appears in place of the format imager.

Note that the format imager is not displayed if there is no tape cartridge loaded in the Label Printer.

- **Tape width indicator**

This indicator shows the width of the tape currently loaded in the tape cartridge compartment. There are two possible widths, 18 mm and 9 mm.

Note that the tape width indicator is not displayed if there is no tape cartridge loaded in the Label Printer.

- **Tape length**

This value shows how long the tape will be when you print it. You can select whether to use inches or centimeters for this value (page 17).

Note that the tape length is not displayed if there is no tape cartridge loaded in the Label Printer.

- **Auto feed indicator**

This indicator shows whether the auto tape feed function is on or off. The default setting when you switch power on is auto feed on.

- **Character position marks**

These marks show where characters will appear as you input them. This part of the display is always blank when you switch power on.

- **Cursor**

The cursor shows the next input position. Any character you input will appear at the point where the cursor is located.

- **Character size indicator**

These values show the height and width measurements of the characters.

- **Number of characters input**

This value shows how many characters you have input. It increase by one each time you input a new character.

3-2 Basic alpha-numeric input

The following operation shows you the basic procedures for inputting letters and numbers. We will explain the procedure by inputting the following characters using the default initial power-on screen.

ABXYZ Computer Company
1234567890

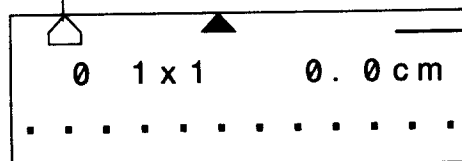
Note

If you hold down any key, it will repeat its operation or input at high speed until you release it.

To input alpha-numeric characters

1. Switch power on and the initial power-on screen appears.
2. Press **CAPS** to shift-lock the keyboard for upper-case letters.

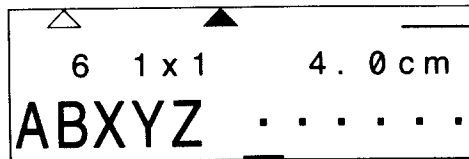
Indicates keyboard is shift-locked to CAPS.



- The following shows how the font indicator changes shapes according to whether or not the keyboard is shift-locked.

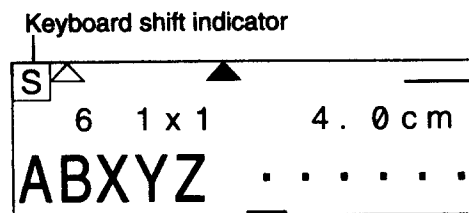
△ : Keyboard unshifted for lower-case input.
▲ : Keyboard shift-locked for upper-case input.

3. Press the correct letter keys to input the word "ABXYZ".
 - If you input a wrong character, press **BS** to delete it and input again. For other details on editing characters, see page 28.
4. Press **SPACE** to input the space after "ABXYZ" and then press **CAPS** to unshift the keyboard.

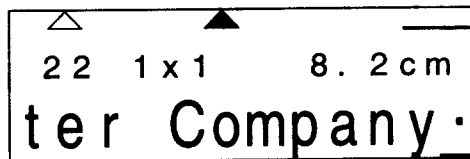


- Note how the display has changed.
 - Number of characters input = 6 (ABXYZ + 1 space)
 - Tape length = 4.0 cm (tape required to print characters)

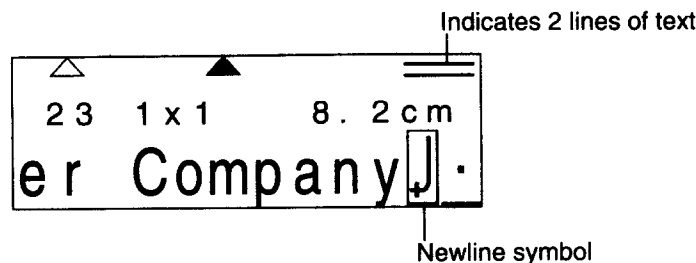
5. Press **SHIFT** to temporarily shift the keyboard to upper-case input for one character, and input "C".



- The keyboard unshifts (and the **S** indicator is cleared) as soon as you input the "C".
 - If you change your mind after you shift the keyboard, you can unshift it without inputting anything by pressing **SHIFT** again.
6. Input the rest of the first line, up to the word "Company". When you are done, the display should look like the one shown here.

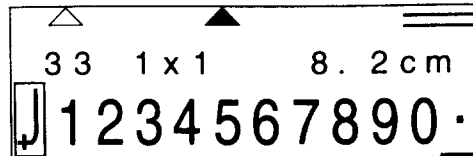


7. Now press **↵** to input a newline symbol.



- You can input up to four lines of 1×1 characters or two lines of 2×2 characters when you are using 18 mm tape.
- You can input up to two lines of 1×1 characters or one line of 2×2 characters when you are using 9 mm tape.

8. Now input the second line: "1234567890".



- Note that the tape length does not change as you input the second line. This is because in our example, the second line is shorter than the first.
9. After you are through, you might want to print. To do so, press **PRINT**. For details, see page 49.

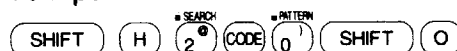
3-3 About the CODE key...

The **CODE** key makes it possible to input punctuation needed for a number of different languages, as well as subscripted and superscripted characters. The following shows the key operations you should use for each of the characters formed using the **CODE** key.

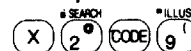
Key Operation	Character	Key Operation	Character
character CODE 9	Superscripts character	O CODE /	Ø
character CODE 0	Subscripts character	C CODE h	Ch
A CODE 1	Á	L CODE l	Ll
A CODE 2	Â	r CODE r	rr
A CODE 3	Ã	A CODE E	Æ
A CODE 4	Ä	I CODE J	IJ
A CODE 5	Å	O CODE E	œ
C CODE 6	ç	s CODE s	ß
A CODE 7	À		
a CODE 8	à		

Examples

1. To input H₂O



2. To input x²



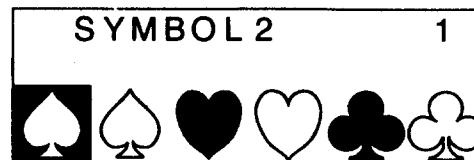
To input special symbols

Example: To input ☎

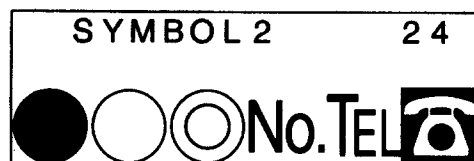
1. With the cursor at the location where you want to input a special symbol, press **FUNCTION** and then **SYMBOL** to display a menu of available symbol lists.



- The highlighted list name is the one that is currently selected.
 - You can skip any of the steps in the following procedure by pressing **ESC**.
2. Use the **^** and **v** cursor keys to move the highlighting up and down until the symbol list you want is selected.
 - To input the symbol for this example, you should select **SYMBOL2**. For a complete list of all symbols in each list, see page 80.
 3. When the symbol list you want is selected (highlighted), press **SET** to display the list of symbols.

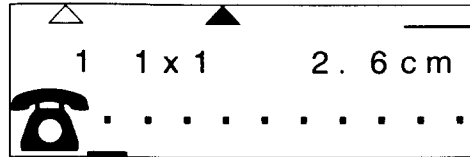


- The highlighted symbol is the one that is currently selected.
4. Use the **^** and **v** cursor keys to scroll through the list line-by-line. Use the **<** and **>** cursor keys to move the highlighting left and right.
 - In this example, press **v** three times and **>** five times to select ☎.



- If the highlighting is at the far left symbol when you press **<**, the highlighting moves to the far right symbol in the line above the current line.
- If the highlighting is at the far right symbol when you press **>**, the highlighting moves to the far left symbol in the line below the current line.

- When the symbol you want is selected (highlighted), press **SET** to return to the input screen. The symbol you selected will be where the cursor was located when you entered the symbol list.



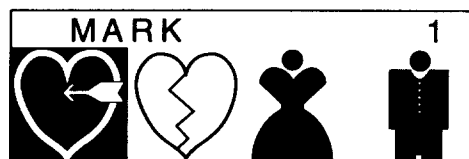
To input illustrations

Example: To input ☀.

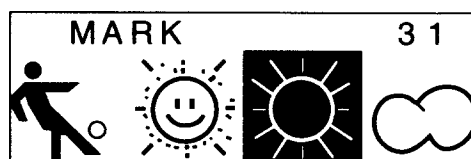
- With the cursor at the location where you want to input an illustration, press **FUNCTION** and then **ILLUST** to display a menu of available illustration lists.
 - The highlighted list name is the one that is currently selected.
 - You can skip any of the steps in the following procedure by pressing **ESC**.



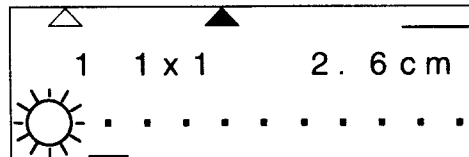
- Use the **^** and **v** cursor keys to move the highlighting up and down until the illustration list you want is selected.
 - To input the illustration for this example, you should select **MARK**. For a complete list of all illustrations in each list, see page 81.
- When the illustration list you want is selected (highlighted), press **SET** to display the list of illustrations.



- The highlighted illustration is the one that is currently selected.
- Use the **^** and **v** cursor keys to scroll through the list line-by-line. Use the **<** and **>** cursor keys to move the highlighting left and right.
 - In this example, press **v** seven times and then **>** twice to select ☀.



- If the highlighting is at the far left illustration when you press **<**, the highlighting moves to the far right illustration in the line above the current line.
 - If the highlighting is at the far right illustration when you press **>**, the highlighting moves to the far left illustration in the line below the current line.
5. When the illustration you want is selected (highlighted), press **SET** to return to the input screen. The illustration you selected will be where the cursor was located when you entered the illustration list.

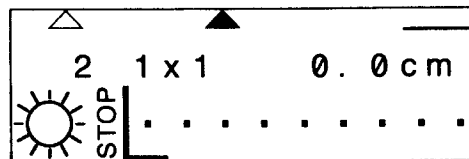


Important

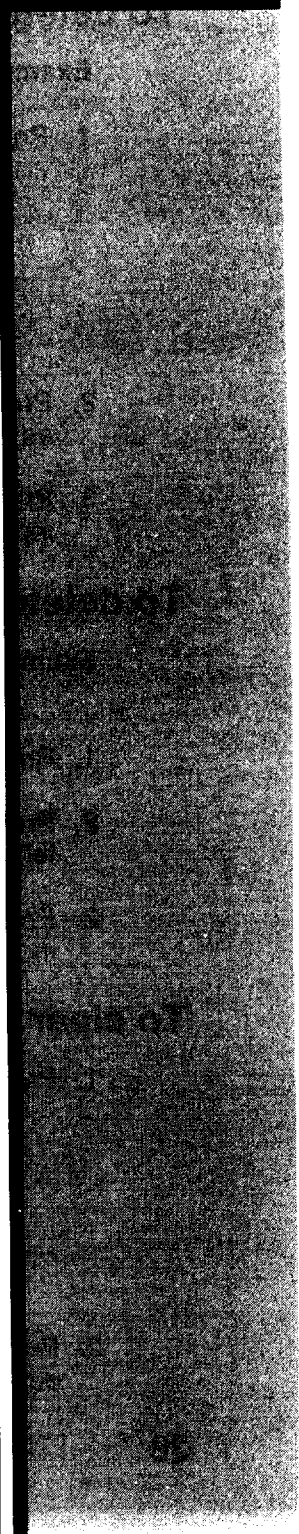
Note that the illustrations take up two character spaces on the display. This means that the display can show a total of six illustrations at one time, as opposed to 12 standard characters.

To input a STOP mark

With the cursor at the location where you want to input a STOP mark, press **FUNCTION** followed by **STOP** to input a STOP mark. For details on when to use STOP marks, see page 51.



Part 4
**Deleting and inserting
characters**



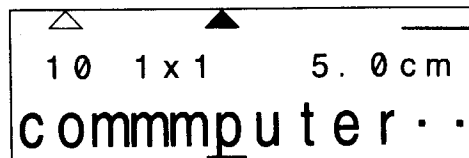
To move the cursor

1. Press < to move the cursor to the left, and > to move the cursor to the right.
 2. Press **FUNCTION** < to make the cursor jump to the beginning of the characters.
 3. Press **FUNCTION** > to make the cursor jump to the end of the characters.
- Holding down the cursor keys moves the cursor at high speed.

To delete characters using the BS key

Example: To change the word “commmputer” to “computer”.

1. Press < 5 times to move the cursor under “p”.



2. Press **BS** twice to delete two m's to the left of the cursor, shifting “puter” to the left as you do.
3. Press **FUNCTION** and then > to jump back to the end of the characters for more input.

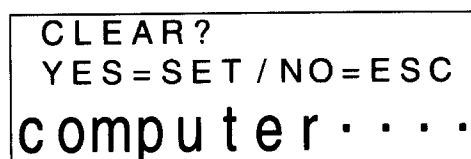
To delete characters using the DEL key

Example: To change the word “commmputer” to “computer” (same example as above).

1. Press < 8 times to move the cursor under the first “m”.
2. Press **DEL** twice to delete two m's at the cursor's position, shifting “mputer” to the left as you do.
3. Press **FUNCTION** and then > to jump back to the end of the characters for more input.

To clear all characters

1. Press **FUNCTION** and then **CLS**.



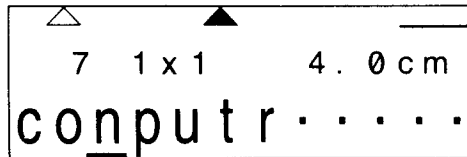
2. Press **SET** to clear all of the characters or **ESC** to cancel the clear operation without deleting anything.

- The clear operation not only deletes characters, it also changes the font setting to serif (page 34) and the style to normal (page 36). It also switches Auto Feed on.

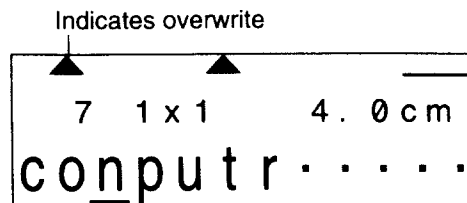
To switch between overwrite and insert

Example: To correct the word “conputr” to “computer”

1. Press < 5 times to move the cursor under “n”.



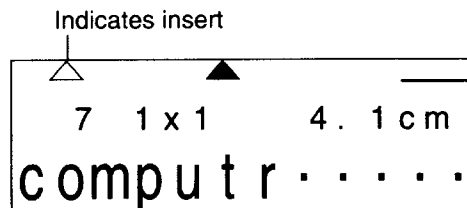
2. Press **SHIFT** and then **BS** to change to overwrite.



- The overwrite specification is cancelled whenever you switch off Label Printer Power.
- The following shows how the font indicator changes shapes and colors according to whether you can overwrite or insert characters, and whether or not the keyboard is shift-locked.

- △ : Insert; keyboard unshifted for lower-case input.
- ◻ : Insert; keyboard shift-locked for upper-case input.
- ▲ : Overwrite; keyboard unshifted for lower-case input.
- : Overwrite; keyboard shift-locked for upper-case input.

3. Input “m” to replace the “n”.
4. Press > three times to move the cursor under the “r”.
5. Press **SHIFT** and then **BS** to switch to insert.



6. Input “e”. The “r” moves to the right to make a space to insert the “e”.
- Inserted characters take on the attributes (page 32) of the character where the cursor is located when you insert the new character.

Part 5

Character attributes

The operations in this part of the manual explain how to change the font, style and size of your characters. These characteristics of a character are called *attributes*.

Important

In addition to font, style, and size, you can select the print pitch (FORM) and also specify other special printing effects (EFFECT). The following explanation about specifying character attributes apply to FONT, STYLE, and SIZE specifications only. See page 42 for details on using FORM and page 40 for EFFECT.

5-1 Specifying character attributes

You can assign attributes (font, style, size) at any of the three following points.

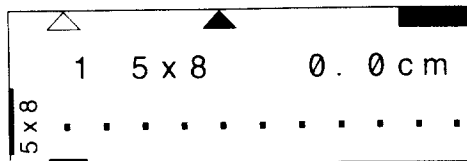
- Before you input any characters
- After you input characters, to specify the attributes for new input
- After you input characters, to change the attributes for existing characters

The techniques to use for each of these cases are described below.

To specify attributes before inputting characters

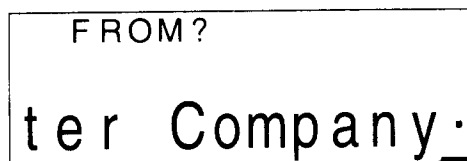
When there are no characters on the display, simply specify the attributes you want. The characters that you input are then automatically assigned the attributes as you input them.

- See the following pages for details on how to specify attributes.
 - Font — page 34
 - Style — page 36
 - Size — page 38
- If you change the character size attribute, a symbol appears to show where the size change takes place.

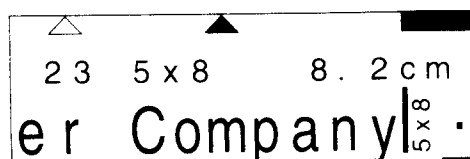


To specify attributes for new characters

1. Whenever you specify an attribute while characters are shown on the display, the screen changes to ask from where you want the attribute applied.



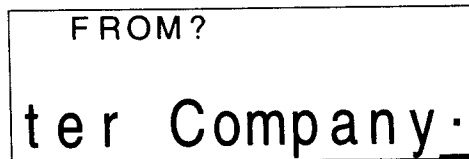
- See the following pages for details on how to specify attributes.
 - Font — page 34
 - Style — page 36
 - Size — page 38
- If you change the character size attribute, a symbol appears to show where the size change takes place.



2. Press **SET** to specify that you want the attribute applied to the new characters you are about to input, and the screen changes to ask up to where you want the attribute applied.
3. Press **SET** again to return to the character input screen. Any characters you now input will be assigned the attribute you specified.

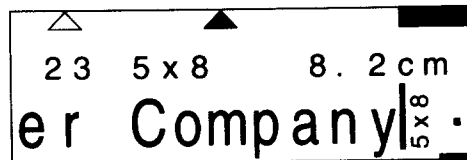
To specify attributes for existing characters

1. Whenever you specify an attribute while characters are shown on the display, the screen changes to ask from where you want the attribute applied.



FROM?
ter Company.

- See the following pages for details on how to specify attributes.
 - Font — page 34
 - Style — page 36
 - Size — page 38
- If you change the character size attribute, a symbol appears to show where the size change takes place.



FROM?
23 5 x 8 8. 2 cm
er Company.

2. Use the **<** and **>** cursor keys to move the cursor to the character where you want the attribute to start.
 - Remember that you can use **FUNCTION <** to jump to the beginning of the characters.
3. Press **SET** to register your specification, and the screen changes to ask up to what character you want the attribute applied.



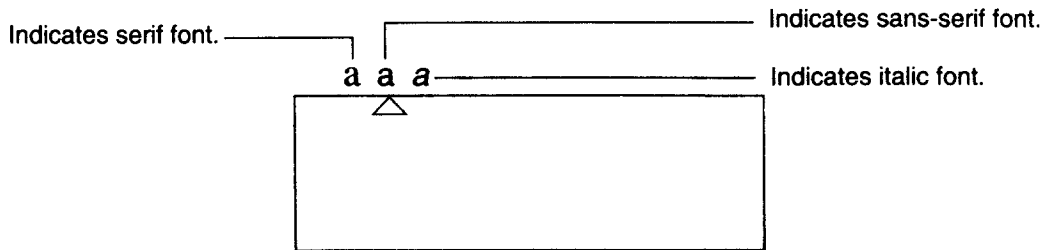
TO?
ter Company.

4. Use the **<** and **>** cursor keys to move the cursor to the character where you want the attribute to end. Characters that will change to the new font are highlighted as you move the cursor.
 - The "TO?" position can be either to the left or right of the "FROM?" position.
 - Remember that you can use **FUNCTION >** to jump to the end of the characters.

5. Press **SET** again to return to the character input screen.
 - The characters on the input screen do not change. The new attributes affect printed characters only.

5-2 About the font indicator...

The font indicator shows the font setting of the character at the current cursor location, as shown here.



To change the character font

Example: To change the word "ABXYZ" in the following characters to sans-serif:

ABXYZ Computer Company

1. Press **FUNCTION** and then **FONT** to display a menu of available fonts.



- The highlighted font is the one that is currently selected.
 - The serif font is the default whenever you switch power on.
2. Use the **^** and **v** cursor keys to move the highlighting up and down until the font you want is selected.
 - For this example, select SANS-SERIF.
 - The following shows examples of each font.

SERIF:

The quick brown fox jumped over the lazy dog.
1234567890

SANS-SERIF:

The quick brown fox jumped over the lazy dog.
1234567890

ITALIC:

The quick brown fox jumped over the lazy dog.
1234567890

3. When the font you want is selected (highlighted), press **SET**.
4. Press **FUNCTION** and then **<** to make the cursor jump to the beginning of the characters (under the "A" of ABXYZ).

FROM?
ABXYZ Comput

5. Press **SET**, and the letter "A" becomes highlighted.

TO?
AABXYZ Comput

6. Use **>** to move the cursor to the right, until it is under the "Z" of ABXYZ.

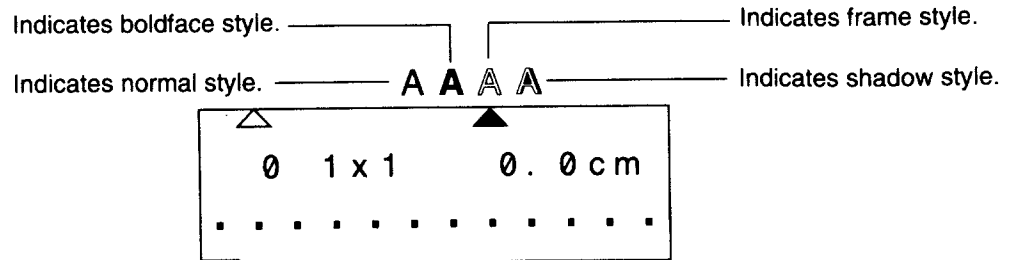
TO?
ABXYZ Comput

7. When the characters you want to change to a new font are highlighted, press **SET**.

a a a
22 1x1 8.2cm
ABXYZ Comput

5-3 About the style indicator...

The style indicator shows the style setting of the character at the current cursor location, as shown here.



To change the character style

Example: To change the word "ABXYZ" in the following characters to shadow:

ABXYZ Computer Company

1. Press **FUNCTION** and then **STYLE** to display a menu of available styles.



- The highlighted style is the one that is currently selected.
 - The normal style is the default whenever you switch power on.
2. Use the **^** and **v** cursor keys to move the highlighting up and down until the style you want is selected.
 - For this example, select SHADOW.
 - The following shows examples of each style.

NORMAL:

The quick brown fox jumped over the lazy dog.
1234567890

BOLDFACE:

The quick brown fox jumped over the lazy dog.
1234567890

FRAME:

**The quick brown fox jumped over the lazy dog.
1234567890**

SHADOW:

**The quick brown fox jumped over the lazy dog.
1234567890**

- A character can have only one style attribute. This means, for example, that you cannot make a character frame and shadow at the same time.
3. When the style you want is selected (highlighted), press **SET**.
 4. Press **FUNCTION** and then **<** to make the cursor jump to the beginning of the characters (under the "A" of ABXYZ).

FROM?
<u>A</u>BXYZ Comput

5. Press **SET**, and the letter "A" becomes highlighted.

TO?
<u>A</u>BXYZ Comput

6. Use **>** to move the cursor to the right, until it is under the "Z" of ABXYZ.

TO?
ABXYZ<u>Z</u> Comput

7. When the characters you want to change to a new style are highlighted, press **SET**.

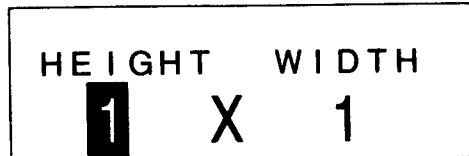
a a a A A A A
▲ ▲
22 1x1 8.2cm
ABXYZ<u>Z</u> Comput

To change the character size

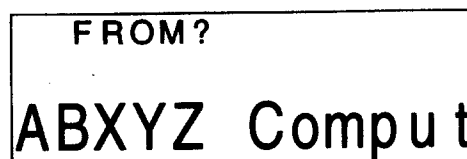
Example: To change the word "ABXYZ" to 5 × 8 and leave the remaining characters at 1 × 1 for the following characters:

ABXYZ Computer Company

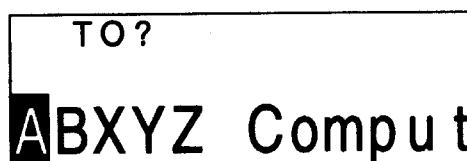
1. Press **FUNCTION** and then **SIZE** to display the size specification screen.



- The highlighted value is the one that is currently selected.
 - 1 × 1 is the default size whenever you switch power on.
2. Use the < and > cursor keys to move the highlighting left and right.
 - For this example, select the value for HEIGHT first.
 - The maximum character height when you are using 9 mm wide tape is 2.
 3. Use the ^ and v cursor keys to change the value.
 - For this example, change the value for HEIGHT to 5.
 4. Repeat steps 2 and 3 to change the value for WIDTH.
 - For this example, change the value for WIDTH to 8.
 5. When the character size is set the way you want it, press **SET**.

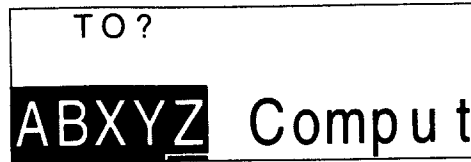


6. Press **FUNCTION** and then < to make the cursor jump to the beginning of the characters (under the "A" of ABXYZ).
7. Press **SET**, and the letter "A" becomes highlighted.

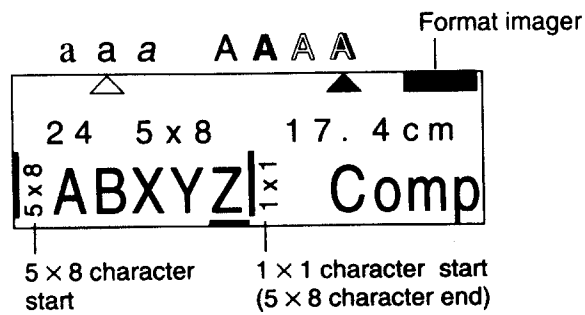


8. Use > to move the cursor to the right, until it is under the "Z" of ABXYZ. The characters that will change to the new size are highlighted as you move the cursor.

- The "TO?" position can be either to the left or right of the "FROM?" position.

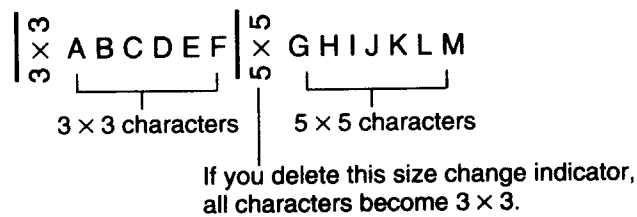


9. When the characters you want to change to a new size are highlighted, press **SET**.

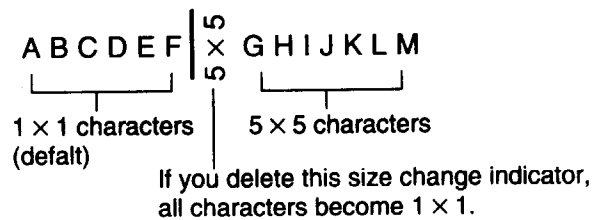


- When you change character size, symbols appear to show where size changes take place.
- Note in the format image indicator. It is thicker because the new character size takes up more vertical space on the tape when it is printed.
- If you use **DEL** (page 28) or **BS** (page 28) to delete a size start symbol, the size of the characters on the display change to that of the nearest indicator to the left.

Example 1



Example 2

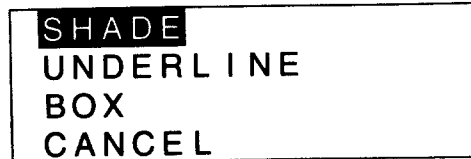


To change the character effect

Example: To change the word "ABXYZ" in the following characters to shade and box:

ABXYZ Computer Company

1. Press **FUNCTION** and then **EFFECT** to display a menu of available effects.



- The highlighted effect is the one that is currently selected.
2. Use the **^** and **v** cursor keys to move the highlighting up and down until the effect you want is selected.
 - For this example, select **SHADE** first.
 - The following shows examples of each effect.

SHADE:

The quick brown fox jumped over the lazy dog.
1234567890

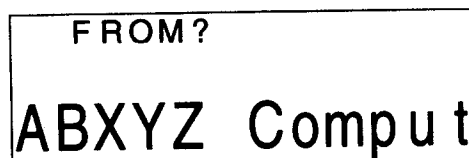
UNDERLINE:

The quick brown fox jumped over the lazy dog.
1234567890

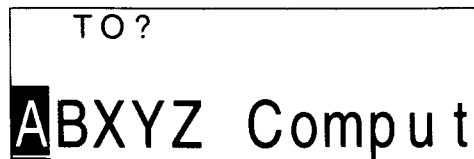
BOX:

The quick brown fox jumped over the lazy dog.
1234567890

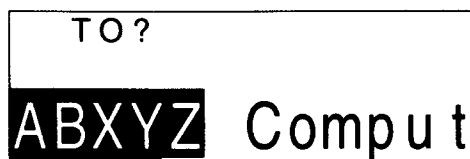
- A character can have more than one effect.
 - If you want to remove effects already assigned to some characters, select **CANCEL**.
3. When the effect you want is selected (highlighted), press **SET**.
 4. Press **FUNCTION** and then **<** to make the cursor jump to the beginning of the characters (under the "A" of ABXYZ), which is the place from which we want the shade effect to start.



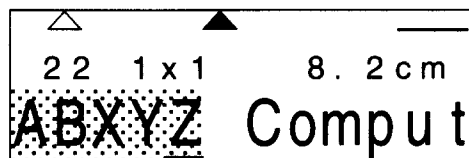
- With character attributes (FONT, STYLE, SIZE), you could specify a start point and end point at the end of the characters you are inputting to specify that the next characters you were going to input should be assigned the attribute (page 32). With EFFECT, you must specify a start point and end point within existing characters. If you specify an EFFECT when the cursor is at the end of the characters, any new characters you input will not be assigned the effect you specify.
5. Press **SET**, and the letter "A" becomes highlighted.



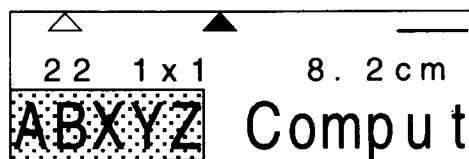
6. Use **>** to move the cursor to the right, until it is under the "Z" of ABXYZ. The characters that will change to the new effect are highlighted as you move the cursor.



- The "TO?" position can be either to the left or right of the "FROM?" position.
7. When the characters you want to change to a new effect are highlighted, press **SET**.



- The characters on the input screen change according to the effect you assigned to them.
8. Repeat steps 1 through 7 to assign the box effect to the letters "ABXYZ".



5-4 About the FORM specification.....

You can use the FORM specification to change the pitch either of all the characters on the display or only of certain characters.

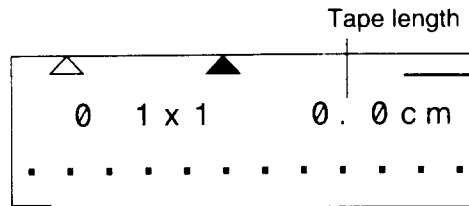
If the characters on the display contain no STOP marks (see page 26), the FORM specification changes the pitch of all the characters.

If the characters contain STOP marks, the FORM specification changes the pitch of the characters where the cursor is located when you change the FORM specification. Note the following.

A B C D E F $\overline{\text{STOP}}$ | G H I J K L M N $\overline{\text{STOP}}$ | O P Q R S T

Cursor located under	Pitch Changed for:
A B C D E F	A B C D E F only
G H I J K L M N	G H I J K L M N only
O P Q R S T	O P Q R S T only

When you change the FORM specification, the tape length value on the character input display is also adjusted accordingly.



The status of the printing is also indicated as noted below.

Tape Length Indicator	Meaning
3.4 cm	This is the normal tape length indication.
[3.4 cm]	This indicates that space between words will be expanded to make the characters fit on the tape.
(3.4 cm)	This indicates that space and characters will be compressed to make the characters fit on the tape.
3.4 cm]	This indicates the characters will not fit on the tape even if space and characters are compressed.

- Tape length indicator values are approximations only. The actual length of the tape produced by the Label Printer may differ somewhat from the value that appears on the display.

To change the character pitch (FORM)

1. Press **FUNCTION** and then **FORM** to display a menu of available pitch settings.



- The highlighted pitch is the one that is currently selected.
 - You can perform this operation either before or after you input characters.
2. Use the **^** and **v** cursor keys to move the highlighting up and down until the pitch you want is selected.
 - For this example, select **NARROW** first.
 - The following shows representative examples of each pitch.

NARROW:

The quick brown fox jumped over the lazy dog.
1234567890

NORMAL:

The quick brown fox jumped over the lazy dog.
1234567890

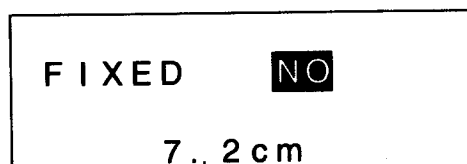
WIDE:

The quick brown fox jumped over the lazy dog.
1234567890

Important

Changing the pitch to **NARROW** setting causes the side of the box produced by the Box effect not to print.

3. When the pitch you want is selected (highlighted), press **SET**.
4. Use **<** and **>** to select **FIXED** or **NO**.



Default tape length if printing is performed using the pitch you selected.

- **NO**
Use this selection when you wish to leave it up to the Label Printer to automatically decide what length of tape to use to print the characters.

- **FIXED**

Use this selection if you want to manually specify the length of the tape to be printed.

5. If you are selecting **NO**, press **SET** to return to the character input screen. If you selected **FIXED**, use **^** and **v** to increase or decrease the tape length. After you specify the tape length, press **SET** to return to the character input screen.
 - You can set the tape length within the following ranges.
 - 0.0 cm to 99.9 cm
 - 0.0 inches to 39.3 inches

Note

- If you select **NO** (variable tape length) in step 4, the tape length changes each time you add or delete a character.
- If you selected **FIXED** (fixed tape length) in step 4, the tape length does not change from your specification unless you add so many characters that they cannot fit on the tape length you specified.

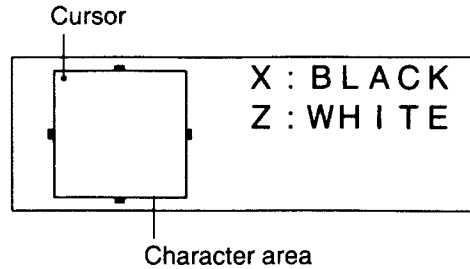
Part 6

User character function

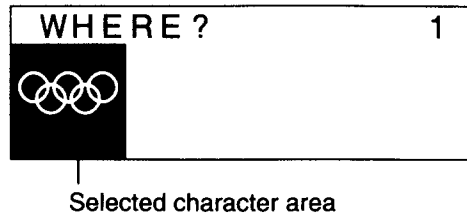
This section explains how you can create your own characters and input them for printout. You can store up to 12 of your characters in memory for recall when you need them.

To create an original character

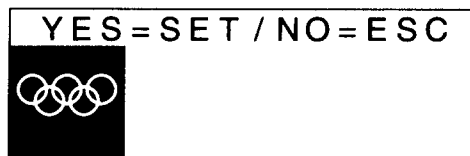
1. With the cursor located under a character position mark (page 20), press **FUNCTION** and then **PATTERN** to display the user character editing screen.



2. Use the cursor keys to move the cursor around the character drawing area.
3. To draw, press the **X** key to select BLACK. The cursor will cause every dot it passes over to become black.
4. To erase, press the **Z** key to select WHITE. The cursor will cause every dot it passes over to become the background color of the display.
5. After you draw what you want, press **SET**.



6. Use the **^** and **v** cursor keys to scroll through the character storage areas line-by-line. Use the **<** and **>** cursor keys to move the highlighting left and right.



7. When the character storage area you want is selected (highlighted), press **SET**.
8. Press **SET** again to store the character or **ESC** to return to the "WHERE?" display without storing anything.
 - If the storage area you select already contains a character, the stored character is replaced with your new one when you press **SET**.
 - To clear a character storage area, just store a blank character (with nothing drawn in the character drawing area) there.

To create a new character based on another character

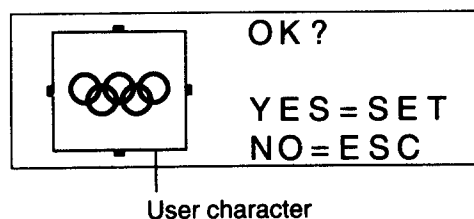
1. With the cursor located under the character you want to use as the basis for your new character, press **FUNCTION** and then **PATTERN**.



2. Use the **^** and **v** cursor keys to select (highlight) **NEW** or **REFERENCE**.
 - **NEW**
Use this selection when you wish to create your own original character from scratch. This selection gives you the same conditions as described under "To create an original character".
 - **REFERENCE**
Use this selection if you want to create a new character based on the character that was above the cursor when you pressed **FUNCTION PATTERN**. Note that you cannot use superscripted, subscripted or characters produced using the **CODE** key (page 23) as reference characters to create new characters.
3. Press **SET**. If you selected **NEW** in the last step, the character drawing area will be blank. If you selected **REFERENCE**, the character that was above the cursor when you pressed **FUNCTION PATTERN** will be in the character drawing area.
4. Use the same procedure starting from step 2 under "To create an original character" to draw and store your character.

To abort character creation without storing anything

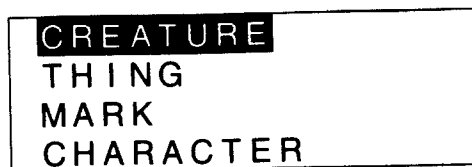
1. Press **ESC** whenever you want to leave character creation without storing anything.



2. Press **SET** to return to the character input screen without storing anything, or **ESC** to resume drawing.

To input user characters

1. With the cursor at the location where you want to input an illustration, press **FUNCTION** and then **ILLUST**.



- The highlighted list name is the one that is currently selected.
2. Use the **^** and **v** cursor keys to move the highlighting up and down until **CHARACTER** is selected.
 3. Continue using the same procedures as described from step 3 under "To input illustrations" on page 25.

Part 7

Printing

This section of the manual explains everything you need to know about printing tapes using the Label Printer. It even tells you how you can use the Label Printer to print bar codes.

Printing Precautions

- Never switch power off while printing is being performed.
- Make sure that the tape outlet is not blocked before you start printing.
- Never operate the tape cutter lever while printing is being performed.
- During printing using very high density (page 50), printing of very long text, or repeat printing of the same text a number of times, the Label Printer may stop printing for about five seconds. This is not a malfunction, and normal printing should resume shortly.

7-1 About the Demo Print function...

The Demo Print function gives you a demonstration of the versatile capabilities of the Label Printer. You can also use it to test for proper operation.

To produce a demo print

1. Press **ON** to switch on Label Printer power.
2. Press **PRINT**.

DEMONSTRATION
PRINTING?

YES=SET / NO=ESC

- If you press **FUNCTION** and then **PRINT** immediately after switching on power, the Label Printer produces a mirror demo print,
- 3. Press **SET** to produce a demo print or **ESC** to abort the operation without printing anything.
- 4. After the printing is complete, pull the tape cutter lever until it stops and cuts off the tape.
- The demo print is produced only when you press **PRINT** immediately after switching power on. Once you produce a demo print, you cannot repeat the operation without switching power off and then on again.
- The following shows the content of the demo print.

Beautiful&Fine
Printing



EZ-Label Printer
CASIO KL-2000

(9 mm tape)

Beautiful&Fine
Printing



CASIO
LABEL PRINTER
EZ-Label Printer
KL-2000

(18 mm tape)

To adjust the printing density

1. Press **FUNCTION** and then **DENSITY** to display the density adjustment screen.

L I G H T D A R K

1 2 **3** 4 5

- The highlighted value is the one that is currently selected.
2. Use the < and > cursor keys to move the highlighting left and right until the print density you want is selected.
 3. After setting the print density, press **SET** to return to the character input screen.
- The density setting you make is retained even when power is switched off.
 - If you perform the reset operation (page 78) the density becomes 3.

7-2 About tape feed...

You can select between two types of tape feed: auto tape feed and manual tape feed.

- **Auto Tape Feed**

When Auto Tape Feed is switched on, the Label Printer automatically feeds 11.5 mm before starting a new printing, and 11.5 mm after completing a printing. This protects against characters being printed up to the edge of the tape.

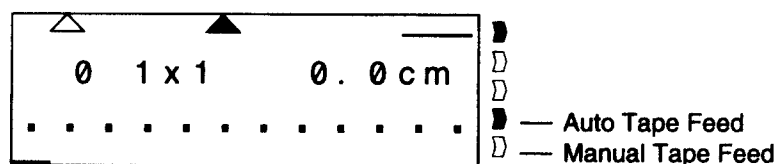
- **Manual Tape Feed**

With Manual Tape Feed (Auto Tape Feed switched off), the Label Printer does not make any allowances for the edges of the tape. It is up to you to press the **FEED** key whenever you want to insert blank tape.

Each time you press **FEED**, the tape is fed 12.5 mm.

To switch between Auto and Manual tape feed

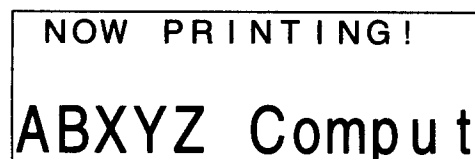
Press **FUNCTION** and then **AUTO FEED** to switch between auto tape feed and manual tape feed. The indicator on the display shows what type of tape feed is being used.



- The Label Printer is automatically set for Auto Tape Feed whenever you switch power on.

To print a tape

1. After inputting text, press **PRINT** to print a tape.



- Printing continues until it reaches the end of the characters or until it reaches a STOP mark (page 26).
- You can manually interrupt printing by pressing **ESC**.
- If you have groups of characters separated by STOP marks (page 42), Use < and > to locate the cursor in the group of characters you want to print before you press **PRINT**.

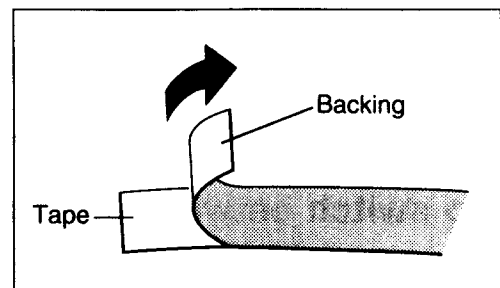
2. After the printing is complete, pull the tape cutter lever until it stops and cuts off the tape.



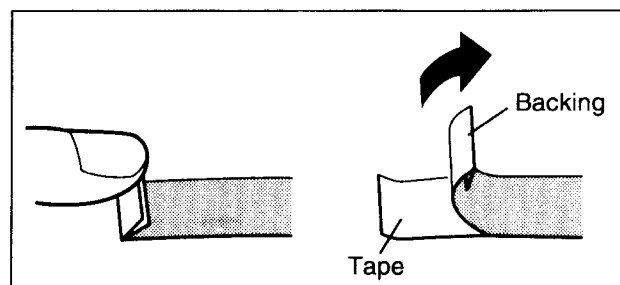
- When cutting the tape, the Label Printer should be lying flat.

- Before you cut the tape you might want to press **FEED** to feed some blank tape at the end of the characters. You can then trim off any excess tape with scissors after you check the printing.

- Once you have a printed tape, you can peel off its paper backing and stick the tape onto the object you want. Note that the tape will not stick on coarse, wet, oily, or soiled surfaces. Also, you should not try to use the tape where it is exposed to direct sunlight or rain. Do not stick the tape onto human skin.



- An easy way to remove the backing from a tape and expose the adhesive surface, is to bend the tape near one of its ends. This should cause the tape and its backing to separate, allowing you to pull them apart.



7-3 About the Mirror Printing function...

The Mirror Printing function produces a reverse image of your characters. This comes in handy when you want to print on the back of transparent tape and then affix it onto the back of clear plastic (protecting it from the weather or other possible wear). When mirror printing is viewed from the opposite side (through the clear plastic), the letters appear normal. The following shows an example of mirror printing.

ABZYX Computer Company

To mirror print a tape

1. After inputting text, press **FUNCTION** and then **MIRROR PRINT**.

MIRROR
PRINTING?

YES = SET / NO = ESC

2. Press **SET** to produce a mirror print or **ESC** to abort the operation without printing anything.
 - Printing continues until it reaches the end of the characters or until it reaches a **STOP** mark (page 26).
 - You can manually interrupt printing by pressing **ESC**.
3. After the printing is complete, pull the tape cutter lever until it stops and cuts off the tape.
 - Before you cut the tape you might want to press **FEED** to feed some blank tape at the end of the characters. You can then trim off any excess tape with scissors after you check the printing.

7-4 About the Bar Code Printing function...

The Bar Code Printing function lets you input values and then print out the corresponding EAN (European Article Number) bar code on the tape. You can print either standard 13-digit bar codes or short 8-digit bar codes. The following shows an example of bar code printing.



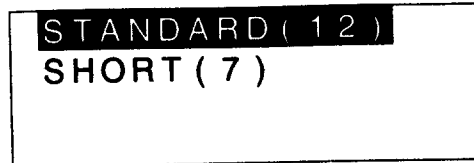
Important

Bar code readers can read bar codes printed in the following color combinations only:

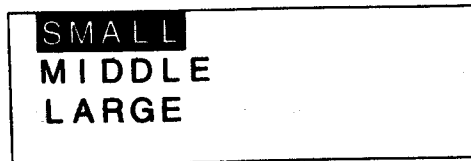
- Black printing on white tape
- Black printing on yellow tape
- Blue printing on white tape

To input bar code data

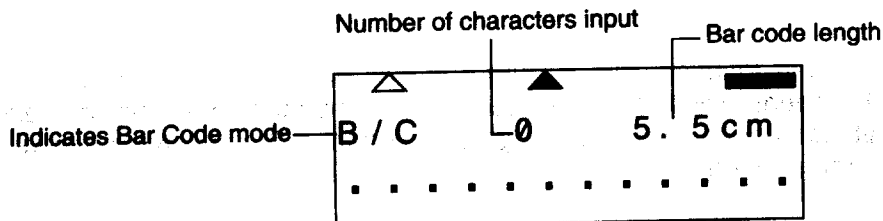
1. Holding down **B**, switch on the Label Printer to enter the Bar Code mode.
 - To exit the Bar Code mode, switch power off and then on again.
 - The highlighted format is the one that is currently selected.



2. Use the **^** and **v** cursor keys to move the highlighting up and down until the format you want to use is selected.
3. When the format you want is selected (highlighted), press **SET**.



- This display lets you select the size of the bar code.
 - The highlighted size is the one that is currently selected.
4. Use the **^** and **v** cursor keys to move the highlighting up and down until the size you want to use is selected.
 5. When the size you want is selected (highlighted), press **SET**.
 - This is the bar code character input screen.



6. Input the numbers that make up the bar code you want to print.
 - If you press **SET** before you input anything, the last characters displayed before you switched power off will appear on the display again (page 14).
 - Remember that you must input all the digits of the bar code, or else you won't be able to print.
 - You can also input short description of the bar code, followed by a **]** mark (page 55) and then the values that make up the bar code. The following table shows the maximum number of characters you can input for the description.

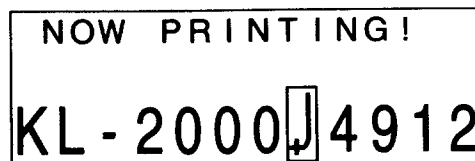
Maximum Number of Description Characters

Format	Size	Number of Characters
STANDARD (12)	SMALL	14
STANDARD (12)	MIDDLE	18
STANDARD (12)	LARGE	23
SHORT (7)	SMALL	10
SHORT (7)	MIDDLE	14
SHORT (7)	LARGE	27

- The following shows an example bar code printing for the data: "KL-2000J4912345678904".

**To print a bar code**

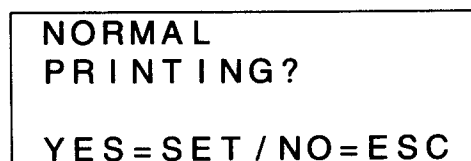
- After you input your bar code data, press **PRINT**.



- After the printing is complete, pull the tape cutter lever until it stops and cuts off the tape.
- When you print a bar code, any specifications you made for character style, effects, size and form are ignored.

To print bar code data

- After you input your bar code data, press **FUNCTION MIRROR PRINT**.



- Press **SET** to print the bar code data or **ESC** to abort the operation without printing anything.
 - After the printing is complete, pull the tape cutter lever until it stops and cuts off the tape.
- When you print bar code data, any specifications you made for character style, effects, size and form are applied.

Part 8

Using the Memo Function

The Label Printer lets you store approximately 1,200 characters of data for recall when you need it. Characters can be divided among multiple “memos” so if each memo consists of about 20 characters, you can store approximately 60 “memos”. Memos are stored in alphabetical order, and handy Search Functions let you recall the memo you need when you need it.

8-1 Storing a memo

Use the following operation to store data in memory as a memo.

To store a memo

1. With the characters you want to store shown on the character input screen, press **FUNCTION** and then **MEMO**.

```
MEMORY ?
YES = SET / NO = ESC

USED           0%
```

Percentage of total memory already
used for memo storage

2. Press **SET** to store the text into memory or **ESC** to abort the operation without storing anything.
- The display shows the message "COMPLETED!" for a short while and then returns to the character input screen with your original text still displayed. You can change the text or even delete it on the input screen without affecting the text you just stored into memory.
 - All character attributes and effects are stored along with the characters.

How the Label Printer sorts memos.....

The following shows the sequence that the Label Printer uses to sort memos stored in memory.

- Superscripting
- Subscripting
- STOP mark
- ↵ mark
- Space
- SYMBOL 1 symbols
- Numbers
- Alphabet characters
- SYMBOL 2 symbols
- SYMBOL Russian characters
- SYMBOL Greek and other characters
- CREATURE illustrations
- THING illustrations
- MARK illustrations
- CHARACTER illustrations

8-2 About memo search types....

There are two techniques you can use to look for a memo: *scroll search* and *direct search*.

- **Scroll Search**

With scroll search, you scroll through memos by pressing the cursor \wedge and \vee keys.

- **Direct Search**

With direct search, you input the initial characters that come at the beginning of the memo you want.

To use scroll search to look for a memo

1. Press **FUNCTION** and then **SEARCH** to display the search input screen.

2. Press the cursor \vee key (or **SET**) to start scrolling through the memos stored in memory.
3. Once the memos are shown, you can scroll up using the \wedge cursor key or down using the \vee cursor key.

4. When the memo you want is shown on the display, you can press **PRINT** to print it or **SET** to transfer the characters from the memo memory to the character input screen. If you want to exit this operation without performing either of the two operations described above, press **ESC**.

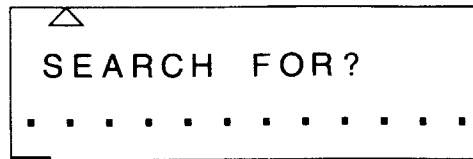
Important

If you press **SET** in the above step, any characters that were on the character input screen when started the search will be *replaced* by the characters from the memo memory.

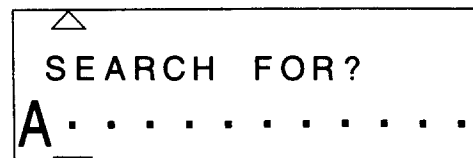
- You can also mirror print a memo. (See page 52.)

To use direct search to look for a memo

1. Press **FUNCTION** and then **SEARCH** to display the search input screen.

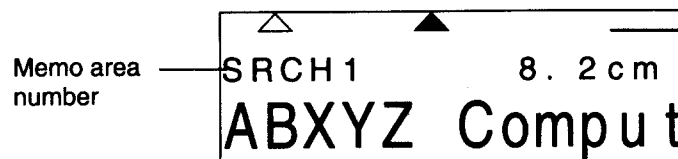


2. Input up to 8 characters that come at the very beginning of the memory you want to search for.



- You can input only 1 character or as many as 8 characters. To search for the word "ABXYZ", for example, you could input "A", "AB", "ABX", "ABXY", or "ABXYZ". The more characters you specify, the more exact your search.

3. Press **SET** to begin your search.



- The Label Printer finds all of the memos that start with the characters you specified.
 - The message "NOT FOUND!" appears when there are no memos that match your specification.
4. The Label Printer displays the first (in alphabetical order) memo that matches your specification. Use the **^** and **v** cursor keys to see if there are any other memos that start with the same characters.
 5. After the memo you want is shown on the display, you can press **PRINT** to print it or **SET** to transfer the characters from the memo memory to the character input screen. If you want to exit this operation without performing either of the two operations described above, press **ESC**.

Important

If you press **SET** in the above step, any characters that were on the character input screen when started the search will be *replaced* by the characters from the memo memory.

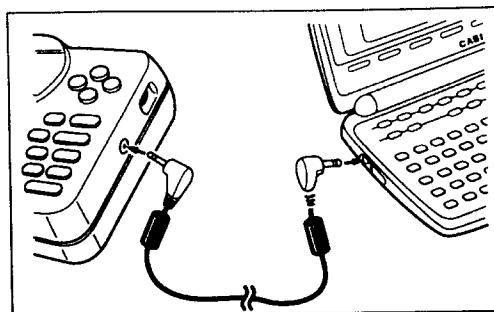
Part 9

Data communication

The operations described here make it possible for the Label Printer to receive data from a CASIO SF Unit.

To receive data from a CASIO SF Unit

1. Make sure both the Label Printer and the CASIO SF Unit are switched off.
 - The Label Printer can receive data from the following CASIO SF Unit models:
SF-9000, SF-9500, SF-9700 (as of February 1992).



2. Connect the two units with an SB-60 or SB-61 cable.
3. Switch on the power of the SF Unit and the Label Printer.
4. Use the SF Unit's function menu to select the PEN PRINTING function, and recall the data you want to send to the Label Printer.
 - For full details on recalling data and executing the print command, see the Owner's Manual of your SF Unit.
5. On the Label Printer, press **FUNCTION** and then **COMMUNICATION**.

RECEIVE DATA?
YES = SET / NO = ESC

6. Press **SET** to start the receive operation or **ESC** to abort the operation without receiving anything.

RECEIVE OK?

- This message indicates that the Label Printer is standing by to receive data.

7. Start the send operation on the SF Unit.

NOW RECEIVING!

- This message indicates that the Label Printer is successfully receiving data from the SF Unit.

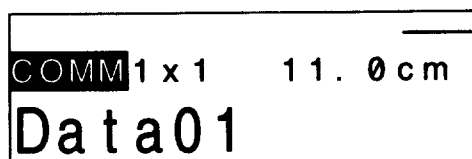
- If the Label Printer does not start to receive data within about 20 seconds, the message "TRANSMIT ERROR!" appears. If this happens, press any key besides **FUNCTION**, **SHIFT**, or **CODE** to return to the display in step 5, above.
8. Once the receive operation is complete, the data communication screen returns with the received data on the display. Now you can print the data.
 - Before you print the received data, you can change the character size (up to 2 × 4 when using 18 mm tape, or up to 1 × 4 when using 9 mm tape).
 - You can also replace the STOP marks within the data with □ marks (see page 28 for details on editing). When you do, the data is printed in multiple lines.
 - Note that when data is transferred to the Label Printer from a CASIO SF Unit, the character positions and fonts are those that are set by the SF Unit.
 9. After you are finished transferring data, be sure to switch off the Label Printer and SF Unit before disconnecting them.

Receiving More than One Set of Data

Normally, each time you receive data from another device, any received data that was already shown on the display of the Label Printer is replaced by the new data. Use the following procedure to receive data and append it at the end of existing data.

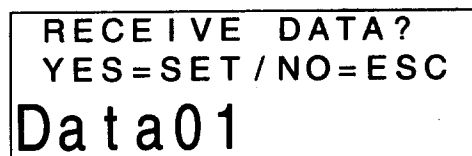
To receive data and retain existing data

1. Before receiving the next set of data, press **FUNCTION** and then **RETURN** to enter the Data Append mode.



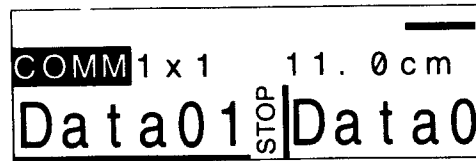
COMM 1 x 1 11.0 cm
Data01

2. Press **SET**.



RECEIVE DATA?
YES=SET / NO=ESC
Data01

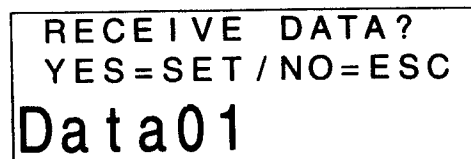
3. Press **SET** to start the receive operation or **ESC** to abort the operation without receiving anything.
4. Start the send operation on the SF Unit, the Label Printer automatically inserts a STOP mark between the two sets of data.



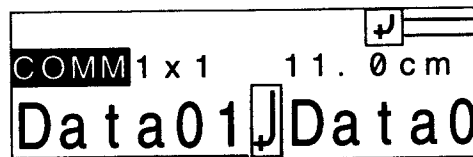
- You can repeat step 2 up to 15 sets of data.
- To exit the Data Append Mode, press **FUNCTION** and then **RETURN** again.

To break data and retain existing data

1. Before receiving the next set of data, press **FUNCTION** and then **RETURN** to enter the Data Append mode.
2. Press **SET**.



3. Press **SET** to start the receive operation or **ESC** to abort the operation without receiving anything.
 4. Start the send operation on the SF Unit, the Label Printer automatically inserts a STOP mark between the two sets of data.
- You can repeat step 2 up to 15 sets of data.
 - You can change the STOP marks between the sets of data to marks to separate the data into lines (up to four lines on 18 mm tape). To change STOP marks to marks, press **RETURN**.



Part 10

Taking care of your Label Printer

This section of the manual tells you how to replace batteries and the ink ribbon/tape cassette, how to replace the memory back up battery, and how to keep the Label Printer in good working order.

10-1 Replacing the memory back up battery

Data stored in the memory of the Label Printer is protected by a single CR2032 lithium battery. Replace this battery at least once a year.

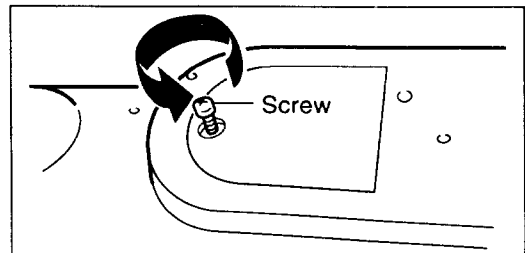
To replace the memory back up battery

1. Make sure that the power supply of the Label Printer is fully charged, and that the Label Printer is switched off.

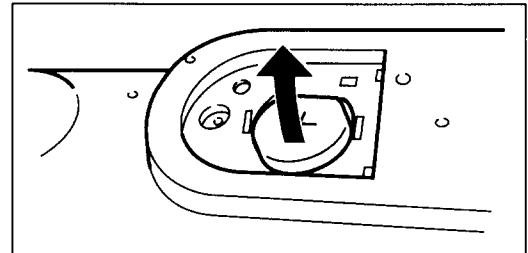
Important!

If you remove the memory back up battery while Label Printer power supply is weak or fully discharged, you may lose the data stored in memory.

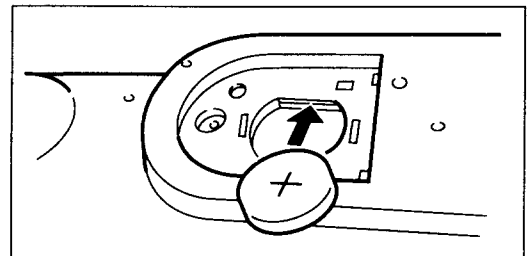
2. Use a Phillips head screwdriver to loosen the screw that holds the back up battery compartment in place, and remove the cover.



3. Remove the old battery.



4. Wipe off the surfaces of a new battery with a soft, dry cloth, and then load it into the battery compartment making sure its positive (+) side is facing up (so you can see it).



5. Replace the battery compartment cover and secure it in place with its screw.

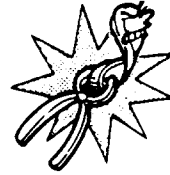
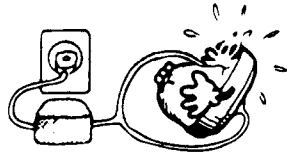
Important!

Note the following important precautions when handling batteries.

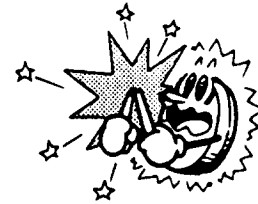
- Make sure that the positive (+) side of the battery is facing up (so you can see it) when you load it into the Label Printer.



- Never try to charge the back up battery or take it apart.



- Never short the two terminals of the battery.



- Never throw batteries into a fire or expose them to direct heat.



Warning

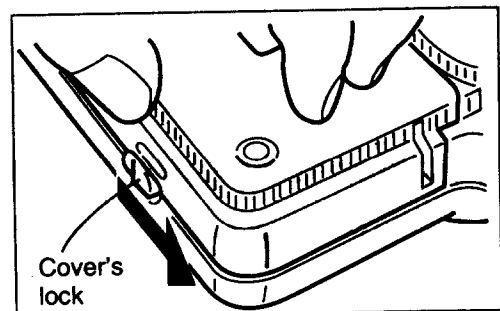
Keep batteries out of the reach of small children. If swallowed, consult with a physician immediately.

10-2 Replacing the tape cutter blade

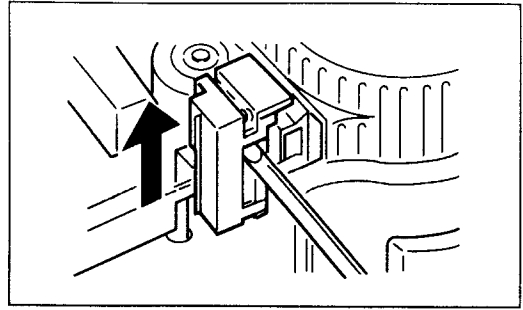
The tape cutter blade is designed to provide approximately 3,000 cuts. Use the following procedure to replace the blade whenever it starts to cut poorly.

To replace the tape cutter blade

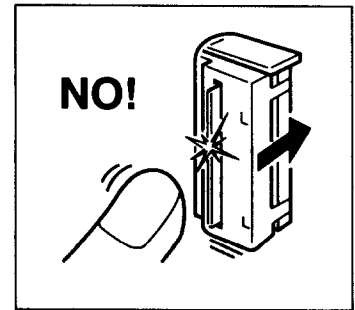
1. Make sure that the Label Printer is switched off.
2. While pressing down gently on the ink ribbon/tape cassette compartment cover, slide the cover's lock to the OPEN position.



3. Use a thin, pointed object to lift the yellow cutter cartridge out of the Label Printer as shown in the illustration.

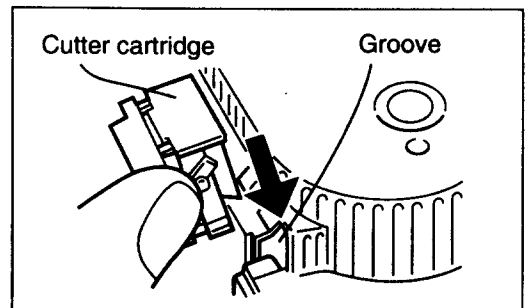


- The tape cutter blade comes out of the cutter cartridge if you press on the front of the cartridge. Be sure to take care to avoid cutting your fingers on the blade.



4. Install a new cutter cartridge by sliding it along the groove provided in the Label Printer.

- Contact your CASIO dealer to purchase a replacement cutter cartridge.



5. Replace the ink ribbon/tape cassette compartment cover.

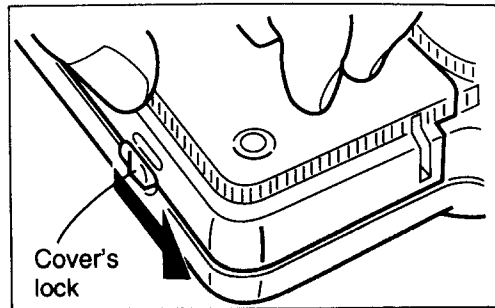
10-3 Cleaning the printer head and roller

A dirty printer head and roller can result in poor printing quality. If you have problems with printing quality, use the following procedure to clean the printer head and roller.

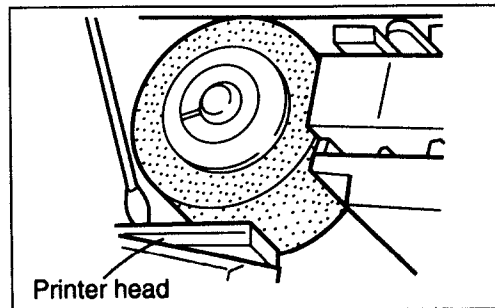
To clean the printer head and roller

1. Make sure that the Label Printer is switched off.

2. While pressing down gently on the ink ribbon/tape cassette compartment cover, slide the cover's lock to the OPEN position.



3. Remove the ink ribbon/tape cassette from the Label Printer.
4. Use a cotton swab dipped in alcohol to clean the printer head and roller as shown in the illustration.



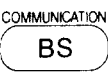










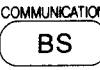


5. Replace the ink ribbon/tape cassette compartment cover.













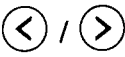



Part 11





Technical Reference

This part of the manual contains technical information that you might need to know.

11-1 About the Label Printer's keys....

Keymark	Name	Descriptions	See page(s)
	Backspace key	<ul style="list-style-type: none"> Press this key to move the cursor to the left, while deleting any characters to the left. 	28
	Caps key	<ul style="list-style-type: none"> Use this key to shift-lock the keyboard between upper-case and lower case. 	21
	Code key	<ul style="list-style-type: none"> Use this key to input special punctuation and characters. A code indicator  appears on the display when you press CODE. 	23
	Down key	<ul style="list-style-type: none"> When in a menu display, this key moves the menu selection down. 	18, 24
	Escape key	<ul style="list-style-type: none"> Press this key to cancel an operation. 	50, 62
	Feed key	<ul style="list-style-type: none"> Press this key to feed the tape from the Label Printer. 	51
	Function key	<ul style="list-style-type: none"> Press this key to shift access the functions marked above some of the keys on the keyboard. A function indicator  appears on the display when you press FUNCTION. <p>• The following describes the functions that are made available using the function key.</p> <ul style="list-style-type: none">  <ul style="list-style-type: none"> Switches the Auto Feed function on and off.  <ul style="list-style-type: none"> Clears the display.  <ul style="list-style-type: none"> Displays a screen to start receiving data from another source.  <ul style="list-style-type: none"> Displays a screen that lets you set the print density.  <ul style="list-style-type: none"> Displays a menu of available effects for printing. 	<p>51</p> <p>28</p> <p>62</p> <p>50</p> <p>40</p>

Keymark	Name	Descriptions	See page(s)
	 FONT # 3	<ul style="list-style-type: none"> Displays a menu of available fonts for printing. 	34
	 FORM & 7	<ul style="list-style-type: none"> Displays a menu of character pitches for printing. 	42
	 ILLUST 9	<ul style="list-style-type: none"> Displays a menu of graphic characters. 	48
	 MEMO ! 1	<ul style="list-style-type: none"> Stores data into the Label Printer's memory 	58
	 MIRROR PRINT PRINT	<ul style="list-style-type: none"> Starts the Mirror Print operation. 	53
	 PATTERN 0	<ul style="list-style-type: none"> Displays a screen for creating your own figures and characters. 	46
	 SEARCH @ 2	<ul style="list-style-type: none"> Displays a screen for searching for characters you specify. 	59
	 SIZE ¢ 6	<ul style="list-style-type: none"> Displays a screen for changing the size of the printed characters. 	38
	 STOP	<ul style="list-style-type: none"> Insert a stop printing mark into the character. 	26
	 STYLE \$ 4	<ul style="list-style-type: none"> Displays a menu of available character styles for printing. 	36
 SYMBOL * 8	<ul style="list-style-type: none"> Displays a menu of available punctuation symbols for English and other languages. 	24	
	Left/Right cursor keys	<ul style="list-style-type: none"> When inputting characters, these keys move the cursor left and right. 	28
	Newline key	<ul style="list-style-type: none"> Press this key to indicate that the next character starts a new line. This key operation is indicated on the display by a newline symbol ¶. 	22
	Print key	<ul style="list-style-type: none"> Press this key to print the characters on the display. 	51
	Set key	<ul style="list-style-type: none"> Press this key to execute an operation. 	13, 26

Keymark	Name	Descriptions	See page(s)
	Shift key	<ul style="list-style-type: none">• Press this key to temporarily shift the keyboard between upper-case and lower-case characters.• A shift indicator  is shown on the display while the keyboard is shifted.• The keyboard shift is cancelled automatically as soon as you input a character.	22
	Space key	<ul style="list-style-type: none">• Press this key to input a space into the characters.	22
	Up/Delete key	<ul style="list-style-type: none">• When inputting characters, this key deletes the character at the cursor position.• When in a menu display, this key moves the menu selection up.	28 47

11-2 Troubleshooting

Check the following table whenever you have a problem with the Label Printer.

	Problem	Possible Cause	Action to Take
Power	<ul style="list-style-type: none"> No display when power is switched on. 	<ul style="list-style-type: none"> Poor contrast setting. Dead power supply. Wrong type of charger used during recharging. Charger not plugged in securely during charging. 	<ul style="list-style-type: none"> Use the contrast dial to adjust the contrast. Charge the power supply for about 10 hours for a full charge. Use the correct charger type — CHA-2C. Other chargers can damage the Label Printer. Make sure the plug is plugged in securely.
Printing	<ul style="list-style-type: none"> No tape comes out when the PRINT key is pressed. Tape comes out but nothing is printed when the PRINT key is pressed. Printing is not clear. 	<ul style="list-style-type: none"> Ink ribbon/tape cassette cover is not closed securely. Out of tape. Tape is jammed. STOP mark is inserted at beginning of characters to be printed. Input characters consist of spaces only. Printing density is not set correctly. Ink ribbon/tape cassette is not loaded correctly. Printer head or roller is dirty. 	<ul style="list-style-type: none"> Close the ink ribbon/tape cassette cover securely. Load a new ink ribbon/tape cassette. Remove ink ribbon/tape cassette and pull out jammed tape with your fingers and cut it off. Avoid operating the tape cutter lever, touching the tape outlet, and touching the tape itself while printing is taking place. Edit input characters to be printed. Input characters to be printed. Change density setting. Load ink ribbon/tape cassette correctly. Clean printer head and roller.

	Problem	Possible Cause	Action to Take
Printing	<ul style="list-style-type: none"> • Ink ribbon comes out with tape. 	<ul style="list-style-type: none"> • Ink ribbon/tape cassette was loaded with too much slack in the ink ribbon. 	<ul style="list-style-type: none"> • Remove ink ribbon/tape cassette and take up slack, taking care not to break ink ribbon. Reload ink ribbon/tape cassette. Always take up slack before loading ink ribbon/tape cassette. If ink ribbon breaks, load a new ink ribbon/tape cassette.
Tape Cutter	<ul style="list-style-type: none"> • Tape does not cut. • Characters are not all printed. 	<ul style="list-style-type: none"> • Tape cutter is dull or damaged. • Auto Feed function is switched off. • End of tape. 	<ul style="list-style-type: none"> • Replace the tape cutter • Press FEED to feed tape before cutting it. • Load a new ink ribbon/tape cassette.
Tape Adhesion	<ul style="list-style-type: none"> • Tape does not stick. 	<ul style="list-style-type: none"> • Paper backing still in place. • Bad surface. 	<ul style="list-style-type: none"> • Remove paper backing from tape. • Tape will not stick on coarse, wet, oily, or soiled surfaces.
Communications	<ul style="list-style-type: none"> • Cannot perform data communication. 	<ul style="list-style-type: none"> • Cable is not securely inserted into jacks. • Too much time passed after display of "RECEIVE OK!" message. 	<ul style="list-style-type: none"> • Insert cable securely into jacks. • Data communications must start within 20 seconds after message is displayed.

11-3 Error Messages

Message	Meaning	Action	See page(s)
PLEASE INITIALIZE!	Power switched on without initializing memory when required.	Initialize memory	13
ABNORMAL DATA! PLEASE INITIALIZE!	Power switched on after data has been lost or corrupted by the battery going dead or some other reason.	Initialize memory.	13
ABNORMAL DATA! CAN'T MEMORIZE!	Attempt to store data without initializing memory when required.	Initialize memory.	13
ABNORMAL DATA! CAN'T PRINT!	Attempt to print data without initializing memory when required.	Initialize memory.	13
NO DATA!	Attempt to store data without inputting anything.	Input data.	21
MEMORY FULL!	Memo Mode memory is full.	Delete unnecessary data from memory to store new data.	58
PLEASE INSERT THE INK RIBBON CASSETTE!	Attempt to print data or feed tape without an ink ribbon/tape cassette loaded.	Load an ink ribbon/tape cassette.	15
TRANSMIT ERROR!	Label Printer cannot perform data communications.	Check cable connections and make sure you are performing procedure correctly.	62
MEMORY FULL!	Communications memory is full.	Reduce the amount of data being sent.	62
NOT FOUND!	<ul style="list-style-type: none"> No data matches the characters you specified for direct search. Attempt to perform scroll search when there is no data in memory. 	<ul style="list-style-type: none"> Try a different specification. Input data before trying scroll search. 	<p>59</p> <p>58</p>

Message	Meaning	Action	See page(s)
LOW BATTERY!	Battery power is low.	Charge battery.	12
PLEASE CHARGE A BATTERY!	Battery power is low.	Charge battery.	12
ERR	Input exceeds maximum number of allowable lines.	Input less data.	20

11-4 Resetting the memory

You should reset the memory of the Label Printer before using the Label Printer for the first time, after you have not used it for a long time, or if nothing happens when you switch the Label Printer on, even if you charge the battery.

To reset the memory

1. Make sure that Label Printer power is off.
2. While holding down **BS**, **SET**, and **ESC**, press **ON** to switch power on.

```

INITIALIZE
MEMORIES?

YES = SET / NO = ESC
    
```

3. Press **SET** to initialize the Label Printer or **ESC** to abort the operation without initializing anything. If you press **SET**, the following initial reset screen appears. See page 79 for a table of initial reset settings.

```

▲          ▲          ───
0  1 x 1    0. 0 cm
. . . . .
    
```

- For details on the initial settings for the Label Printer following the reset operation, see below.

11-5 Initial Settings

There are two types of initial settings: those that are set automatically each time you switch on Label Printer power and those that are set whenever you reset the Label Printer. The following shows the initial settings in each case.

Item	Power On	Reset
Display	Cleared*	Cleared
Memo Contents	Retained	Cleared
Form	Normal	Normal
Insert/Overwrite	Insert	Insert
Font	Serif	Serif
Style	Normal	Normal
Auto Feed	On	On
Size	1 x 1	1 x 1
Density	Retained	3
Language	Retained	English
Length Unit	Retained	cm

* Display is cleared, but last input data is retained in memory. To recall the last input data, press **SET**.

11-6 How to get maximum battery performance...

When you let the battery go completely dead and then charge it again, you may not be able to get a full charge even if you charge the battery for 10 hours. In such a case, use the following procedure to get maximum battery performance.

1. Charge the battery for 10 hours.
2. Print about ten 1 x 1 characters.
3. Charge the battery again.
4. Repeat steps 2 and 3 about four or five times for optimum results.

11-7 Symbols and Illustrations

Symbol

SYMBOL 1

, . : ; ? ! " ' " " ; i () [] { } < > « » / \ \$ ¢
 £ Fr ¥ # & * @ § % ‰ + - × = - _ ~

SYMBOL 2

♠ ♡ ♥ ♣ ♦ ☆ ★ ■ □ ▲ △ ▽ ▾ ◆ ◇
 ● ○ ◎ No. Tel. ☎ → ← ↑ ↓ ⇒ ⇔ ⇌ ⇍ ⇎ ⇏ ♂ ♀
 ^ ° ´ ¨ 【 】 · …… | ∴ ∷ ÷ ≠ < > « »
 ∞ # b ♯ † ‡ ¶ ※ ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩
 I II III IV V VI VII VIII IX X i ii iii iv v vi vii viii
 ix x **1 2 3 4 5 6 7 8 9 0** ½ ¼ ¾

RUSSIAN

А Б В Г Д Е Ё Ж З И Й К Л М Н О П Р
 С Т У Ф Х Ц Ч Ш Щ Ъ Ы Ь Э Ю Я а б в
 г д е ё ж з и й к л м н о п р с т у
 ф х ц ч ш щ ъ ы ь э ю я

GREEK/ETC

Α Β Γ Δ Ε Ζ Η Θ Ι Κ Λ Μ Ν Ξ Ο Π Ρ Σ
 Τ Υ Φ Χ Ψ Ω α β γ δ ε ζ η θ ι κ λ μ
 ν ξ ο π ρ σ τ υ φ χ ψ ω Α̇ Ć Ę Ł Ń Ś
 Ź Ż ą ć ę ł ń ś ź ż Ő Ű ő ű Č Ď ě Ň
 Ř Š Ť Ů Ý Ž č ď ě ň ř š ŧ ů ý ž

11.9 Specifications

Model: KL-2000

Input

Keyboard Layout: Typewriter

Character Types

Alpha (English and other languages): 118

Numbers: 10

Symbols 1: 43

Symbols 2: 105

Russian: 66

Greek, etc.: 88

Illustrations: 224

User: 12

Display

Type: 32 × 96-dot liquid crystal display

Number of Columns: 12

Character Matrix: 16 × 8-dot

Printing

Type: 128-dot thermal transfer

Speed: Approximately 20mm/second

Width: 8mm (with 9mm tape) or 16mm (with 18mm tape)

Character Matrix: 24 × 24-dot and 12 × 12-dot (super and subscripting)

Character Fonts: Serif, sans-serif, italic

Character Styles: Normal, boldface, frame, shadow

Character Effects: Shade, underline, box, cancel

Character Sizes: 1 × 1 to 2 × 8 (9mm tape); 1 × 1 to 5 × 8 (18mm tape)

Character Pitches: Narrow, normal, wide (proportional)

Number of Lines: 1 or 2 (9mm tape); 1 to 4 (18mm tape)

Memory

Input: Up to 127 characters

Memo Mode Storage: Approximately 60 memos of 20 characters each.

Recall: Scroll Search, Direct Search

Data Communications

Applicable Devices: CASIO SF Unit

General

Battery: Rechargeable Nickel Cadmium battery (full charge = 10 hours)

Memory Back Up Battery: One CR2032 lithium battery (battery life = approximately 1 year)

Power Consumption: 16W

Auto Power Off: Approximately 6 minutes after last key operation

Dimensions: 190 (W) × 119 (D) × 59 (H) mm

Weight: 665 g (including batteries)

Ambient Temperature: 10°C to 35°C (50°F to 95°F)

Accessories: CHA-2C Battery Charger
Ink Ribbon/Tape Cassette