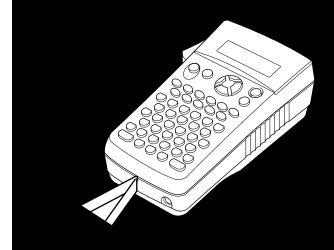




USER'S GUIDE

- Read this User's Guide before you start using your P-touch.
- Keep this User's Guide in a handy place for future reference.



INTRODUCTION

Thank you for purchasing the P-touch 210E!

Your new P-touch will allow you to create labels for any application. Its extreme versatility enables you to design custom labels by choosing from different frame designs and many character sizes and styles. In addition, the four tape widths (6 mm, 9 mm, 12 mm and 18 mm) and variety of tape colours allow you to print personalised labels, useful for colour-coded filing.

You no longer have to worry about urgent tasks that require professional printing. The quality and performance of the P-touch 210E makes it an extremely practical machine.

Although this machine is easy to use, we suggest that you read this User's Guide carefully before starting and keep it in a handy place for future reference.

Use only the adapter designed exclusively for this machine. See GENRRAL PRECAUTIONS on page 4.

After using your P-touch, store it in the enclosed carrying case. This carrying case is designed to help protect the P-touch while enabling you to carry it anywhere you go.

Declaration of Conformity

We Brother International Europe Ltd.

Brother House 1, Tame Street Audenshaw Manchester M34 5JE IJ K

declare that the Labelling System PT-210E conforms with the following normative documents:

EMC: EN 55022 1994 Class B

EN 50082-1 1992 EN 60555-2 1987

and follows the provisions of the Electromagnetic Compatibility Directive 89/336/EEC (as amended by 91/263/EEC and 92/31/EEC). The AC adapter, as supplied with this system, also conforms with EN 60950 and follows the provisions of the Low Voltage Directive 73/23/EEC.

Issued by: BIE Ltd.

European Development and Technical Services

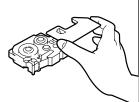
Division



• Please read this notice carefully before starting

To insert a new tape cartridge

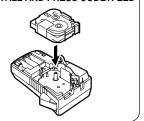
· REMOVE THE PAPER STOPPER



· USE YOUR FINGER TO TIGHTEN THE RIBBON



· INSTALL AND PRESS CODE+FEED



Cutting Tape

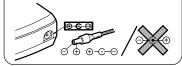




TO CUT TAPE,
USE THE BUILT-IN
CUTTER LEVER.
UNDER NO
CIRCUMSTANCES ATTEMPT TO CUT
THE TAPE
WHILE PRINTING
OR FEEDING.

AC Adapter connection

· USE AC ADAPTER DESIGNED EXCLUSIVELY FOR THIS UNIT



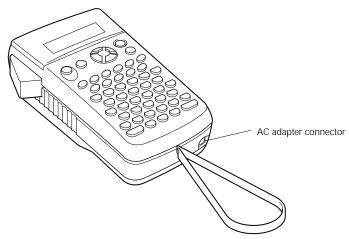
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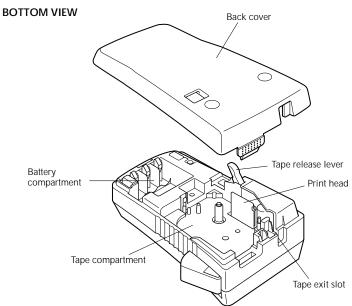
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Getting started

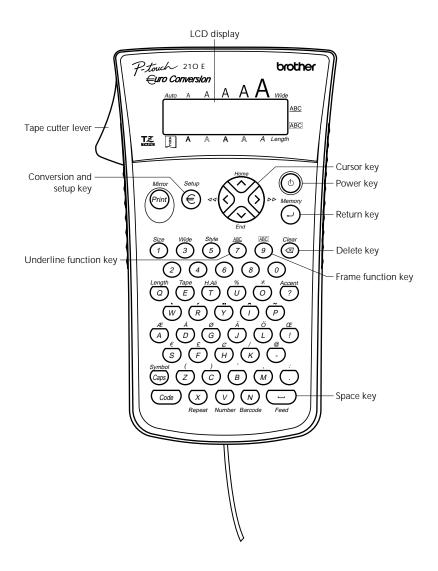
GENERAL DESCRIPTION

TOP VIEW





KEYBOARD & LCD DISPLAY



GENERAL PRECAUTIONS

- Use only Brother TZ tapes with this machine. Do not use tapes that do not have the TZ mark.
- Do not pull on the tape being fed from the P-touch. This may damage the tape cassette.
- Do not put any foreign objects into or anything on the machine.
- Do not clean the machine with alcohol or other organic solvents. Use only a soft, dry cloth.
- Do not leave any rubber or vinyl on the machine for an extended period of time.
 Doing so may cause staining.
- Do not use the machine in dusty places, and keep it out of both direct sunlight and rain.
- Do not expose the machine to high temperatures or high humidity. Never leave it
 on the dashboard or in the back of your car.
- Do not touch the print head mechanism. If the head is touched, clean it immediately with a cotton swab to avoid permanent damage.
- When the machine is not being used for a long period of time and it is not necessary to keep the text files stored in the memory, disconnect the AC adapter, and remove the batteries to prevent them from leaking and damaging the machine.
- When the AC adapter is connected, unplugging the adapter from the electrical outlet before unplugging it from the machine can delete all text files in the memory, even if batteries are installed.
- Use six AA (AM3, LR6) alkaline batteries in this machine.
- Use only the AC adapter designed exclusively for this machine. Use of any other adapter will void the warranty.

BATTFRIFS

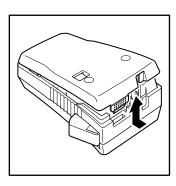
This lightweight and portable machine can be used anywhere by installing six (6) AA (AM3, LR6, SUM-3, R6) batteries. <u>Alkaline batteries are recommended</u>. When changing the batteries, always replace all six at the same time.

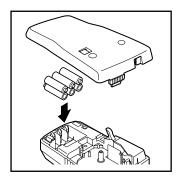
To change the batteries:

- Remove the back cover by pressing in on the rough area at the top end of the machine and pulling off the cover. Pulling off the back cover lifts up the tape release lever.
- 2 If batteries are already installed, remove them.
- Insert six new batteries, making sure that they face the direction shown in the illustration on the bottom of the battery compartment. The positive ends of the three batteries in the bottom row point towards the bottom of the machine, while the positive ends of the top three batteries point in the opposite direction.
- 4 Attach the back cover by inserting the tab on the bottom end of the cover into the slot on the bottom end of the machine, then pushing down firmly on the top end of the cover until it snaps into place.
- Be sure to insert the new batteries within five minutes of removing the old ones, otherwise the text shown in the LCD display and any text files stored in the memory will be lost (unless the machine is plugged into an electrical outlet with the AC adapter).

Remove the batteries and disconnect the AC adapter if you do not intend to use this machine for an extended period of time. When the power is disconnected, all text shown in the display and stored in the memory will be lost.

If alkaline batteries are not used, large fonts and bar codes cannot be printed.





OPTIONAL AC ADAPTER

The AC adapter allows you to use this machine wherever there is an electrical outlet.

To connect the optional AC adapter:

- Insert the plug on the adapter cord into the connector marked DC IN 9.5V on the bottom end of the machine.
- 2 Insert the plug on the adapter into the nearest standard electrical outlet.
- Only use the AC adapter designed exclusively for this machine.

Remove the batteries and disconnect the AC adapter if you do not intend to use this machine for an extended period of time. When the power is disconnected, all text shown in the LCD display and stored in the memory will be lost.

When the AC adapter is connected, unplugging the adapter from the electrical outlet before unplugging it from the machine can delete all text files in the memory, even if batteries are installed.

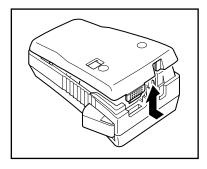
It is recommended that you use the AC adapter when printing large fonts and bar codes on 18-mm-wide tape since these operations can quickly drain the batteries.

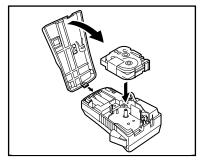
TAPE CASSETTE

A single TZ tape cassette is supplied with this unit. However, since TZ tape cassettes are available for this machine in a wide variety of colours and sizes, it is possible to make distinctive colour-coded and stylised labels. In addition, this machine has been designed to allow the tape cassettes to be changed quickly and easily.

To change the TZ tape cassette:

- Remove the back cover by pressing in on the rough area at the top end of the machine and pulling off the cover. Pulling off the back cover lifts up the tape release lever.
- 2 If a tape cassette is already installed, remove it by pulling it straight out.
- **3** Remove the stopper from a new tape cassette.
 - Make sure that the end of the tape feeds under the cassette tape guides.
 If the ink ribbon in the cassette is loose, use your finger to wind the toothed wheel in the direction of the arrow on the tape cassette until the ribbon is taut. If you are using an old tape cassette, be sure the ribbon is taut before inserting it into the unit.
- Insert the tape cassette firmly into the tape compartment, making sure that the entire back of the cassette touches the bottom of the compartment.
 - When inserting the tape cassette, make sure that the inner ribbon does not catch on the corner of the metal guide.
- Attach the back cover by inserting the tab on the bottom end of the cover into the slot on the bottom end of the machine, then pushing down firmly on the top end of the cover until it snaps into place.
- Turn on the machine if it is off, then feed the tape to remove any slack by holding down code and pressing conce.
- **7** Press in the tape cutter lever to cut off any excess tape.



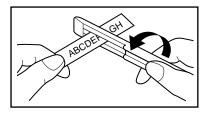


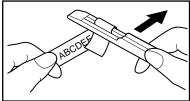
ATTACHING LABELS

LAMINATED TAPE

The enclosed stick enables you to easily remove the backing from labels printed on laminated tapes.

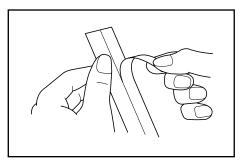
- Hold the tape in your left hand, with the printed surface facing up, and hold the stick in your right hand.
- 2 Pass the tape halfway through the long narrow hole in the stick.
- Turn the stick one quarter of a turn towards you and pull the stick away from you as shown below.
- Peel off the label backing.





NON-LAMINATED TAPE

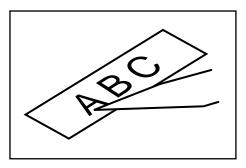
Labels printed on non-laminated tapes can be folded in half so that the inside edges of the two backing pieces come off the label, enabling the backing to be peeled off easily.



INSTANT-LETTERING TAPE (RUB-ON TRANSFERS)

Instant-lettering tape is used to transfer your text onto paper. After printing the text onto instant-lettering tape and cutting off the label, position the label with its non-printed side up on a sheet of paper. By simply rubbing the instant lettering tape's non-printed side with the enclosed stick, you can transfer the text directly onto the paper.

Hold the tape very firmly so that it does not move while you transfer the text.



IRON-ON TRANSFER TAPE

Iron-on transfer tape is used to transfer your text onto garments using an iron.

- Insert an iron-on transfer tape cassette, press to print the text, then press in the tape cutter lever to cut off the label.
- 2 Iron the garment to flatten it before transferring the text.
- Place the label with its non-printed side up at the location where you wish to transfer the text onto the garment.
- Set the iron to cotton (150 to 180 °C), then press down on the label with the iron for about 15 seconds.
- Allow the iron-on transfer to cool (for about 60 seconds), then carefully remove the backing tape.
- White garments made from 100% cotton with a plain (smooth) surface are best for iron-on transfers.

You can also make transfers to garments made from 100% linen or cotton/polyester blends as long as they have a plain (smooth) surface.

The label will not adhere properly to any cloth with a rough surface, such as pile or denim, or with a waterproof surface. Heat-sensitive materials, such as nylon, acetate or other similar fibres, are also unsuitable as they may be damaged when pressing with an iron at a high temperature.

Press the iron straight down onto the cloth. Do not move the iron while pressing, otherwise the label may move out of the desired position.

After the backing tape has been removed, the transferred label may appear glossy. In addition, some white spots may have appeared on the label if it was touched while the backing tape was peeled off. These can be removed by ironing over the label with a piece of cloth placed between the label and the iron.

The label will have a white background on coloured cloth.

Since the transferred label cannot be removed once it is applied, make all transfers with care.

Washing:

Garments with transfer labels can be washed over 20 times if the label has been transferred correctly. Normal biological and non-biological household detergents may be used.

The label may become discoloured if the garment is placed in bleach for an extended length of time.

Be careful that hard objects, such as buckles or buttons, do not come into contact with the label during the wash.

Do not dry clean garments which have had transfer labels applied.

Drying:

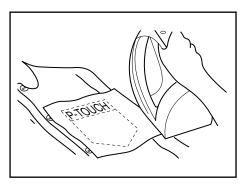
Do not tumble dry garments which have had transfer labels applied. The transfers may come off and stick to other items of clothing.

Garments with transfer labels may be dried inside out as well as in the normal way.

Ironing:

Use normal temperature settings to iron garments with transfers.

Iron with a piece of cloth placed between the iron and the transfer to prevent it from sticking to the iron.



The transfer labels are non-toxic, however, please maintain the usual precautions, such as not placing them in your mouth, etc.

Do not store iron-on transfer tape cassettes in areas exposed to direct sunlight, high humidity or dust.

FABRIC TAPE

A piece of fabric tape printed with your text can be attached to garments using an iron. After printing the text onto fabric tape and cutting off the label using <u>scissors</u>, place the label on an ironed garment at the location where you wish to attach it in such a way that the printed text can be read correctly. Cover the label with another piece of cloth and use an iron set to a medium-high temperature (160 to 180 °C) to press down firmly for 10 to 15 seconds. For more details, refer to the instructions included with the fabric tape cassette.

STAMP TAPE

By making a stencil from TZ stamp stencil film and affixing it to a self-inking stamp film holder, you can easily create your own personalised stamps. To make a stamp using your P-touch 210E, install a MEDIUM stamp stencil film (18-mm-wide stencil film with a 12-mm-wide print area) cassette as described on page 7, then enter the text as explained below.

- Use the Length function to set the tape length to 105 mm (for MEDIUM stamp stencil films).
- 2 Use the Horizontal alignment function to select the CENTRE setting.
- 3 Use the Tape feed function to select the FULL setting.
- Enter the text so that it fits within an area of 9 x 55 mm (for MEDIUM stamp stencil films).

To check the text and its length, remove the stamp stencil film cassette and insert a normal 12-mm-wide label tape cassette, then print a trial label.

For more information refer to the instructions included with the Stamp Kit.

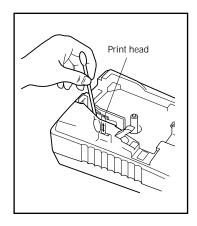
PRINT HEAD & ROLLERS

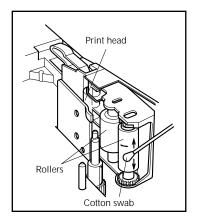
Occasionally, specks of dust or dirt become attached to the machine's print head and rollers. This is particularly likely when you are using the unit outdoors or in a very dusty environment. If a section of the print head is covered with dust, a blank horizontal streak may appear through the label text. Therefore, as with a tape recorder, the machine's head may need to be cleaned from time to time.

To clean the print head and rollers:

- Turn off the machine.
- Remove the back cover, then remove the tape cassette if one is installed. The print head and rollers are located in the tape compartment.
- Print head: Use a dry cotton swab to gently wipe the print head with an up-and-down motion. The print head is the thin vertical line to the left of the ceramic "lump".
 - Rollers: Use a dry cotton swab to wipe each roller with an up-and-down motion while rotating them with your finger.
- 4 Install a tape cassette, attach the back cover, then try printing again.
- If dust still remains, repeat steps 2 through 4 using a cotton swab dipped in iso-propyl (rubbing) alcohol.
 - The UK Health & Safety Executive recommends that precautions be taken to ensure that solvents such as isopropyl alcohol be used in a safe manner. Please read and follow the instructions printed on the solvent's container.

If none of the above works, contact your service representative.

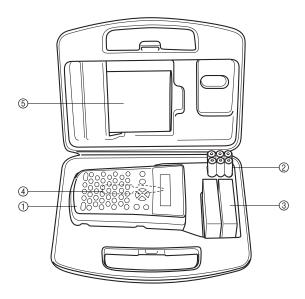




CARRYING CASE

The enclosed hard case is designed to protect your P-touch and its accessories while you store or carry them. Therefore, keep them in this carrying case whenever they are not being used.

Before opening the carrying case, be sure that the side with the "brother P-touch" logo faces upward.



- P-touch
- ② Six AA batteries
- ③ Tape cassettes
 - Stand up the tape cassettes so that the end with the label attached faces upwards.

This compartment can store up to two cassettes of 6-mm-, 9-mm- or 12-mm-wide tape, and a cassette of 18-mm-wide tape.

- (4) Lettering stick
- (5) User's Guide

For your information

POWER KEY

The power key () is located in the top right-hand corner of the keyboard. If batteries have been installed or the machine has been plugged in using the optional AC adapter, the previous session's information is displayed when the machine is turned on. This feature allows you to stop work on a label, turn off the machine, and return to it later without having to re-enter the text.

The machine will automatically turn off if no key is pressed within 5 minutes. The machine's internal memory stores the current session's information and displays it when you turn on the machine again.

To turn on the machine:

Press 6. The previous session's information appears in the LCD display.

To turn off the machine:

Press 6. The current session's information is stored in the internal memory.

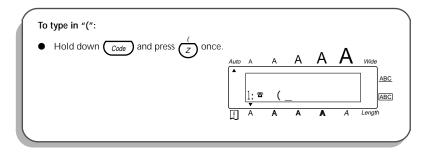
CODE & CAPS KEYS

Most characters can be entered simply by pressing their keys. However, to use special functions or to enter uppercase letters, accented characters and some symbols, the following special keys are necessary.

CODE KEY

To use a function or type in characters printed in yellow above a key:

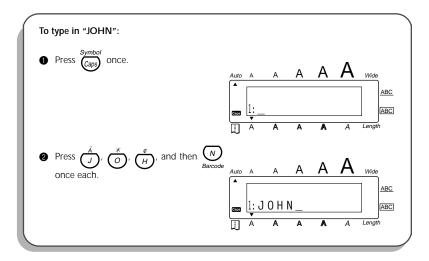
 Hold down <u>Code</u> and press the key immediately below the desired function or character written in yellow.



CAPS KEY

To type uppercase letters continuously:

- To enter Caps mode, press until the Caps indicator (Caps) on the left side of the display lights up.
- 2 Press the desired characters.



CURSOR KEYS

The machine's LCD display shows two rows of 11 characters; however, the text that you create can be up to 99 characters long. You can review and edit your text by using the cursor keys (${}^{44}\bigcirc$, ${}^{\text{Home}}\bigcirc$, ${}^{\text{Pow}}\bigcirc$, ${}^{\text{Pow}}\bigcirc$) to move the cursor so that different parts are shown in the display.

LEFT CURSOR KEY

To move the cursor one character to the left:

● Press

once.

To move the cursor several characters to the left:

Hold down down down until the cursor moves to the desired position.

To move the cursor to the beginning of the current line:

RIGHT CURSOR KEY

To move the cursor one character to the right:

● Press ♦ once.

To move the cursor several characters to the right:

Hold down ♦ until the cursor moves to the desired position.

To move the cursor to the end of the current line:

Hold down Code and press ♦

UP CURSOR KEY

To move the cursor up to the previous line:

lacktriangle Press $\stackrel{\textit{Home}}{\diamondsuit}$ once.

To move the cursor up several lines:

Hold down with the cursor moves to the desired position.

To move the cursor to the beginning of the entire text:

Hold down Code and press

DOWN CURSOR KEY

To move the cursor down to the following line:

• Press 📀 once.

To move the cursor down several lines:

Hold down until the cursor moves to the desired position.

To move the cursor to the end of the entire text:

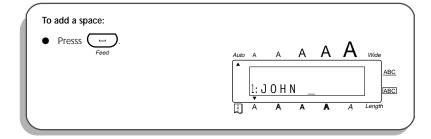
• Hold down \bigcirc and press \bigcirc and \bigcirc

SPACE KEY

The space key lets you add blank spaces between characters in your text. It is different from the right cursor key ((\$\sigma_{e^*}\$), which just moves the cursor without adding blank spaces.

To add a space:

● Press —.



RETURN KEY

Like on a typewriter or word processor, this machine's return key () is used to end a line of text and start another one. When you have finished entering one line of text, press the return key to add a return mark () to the end of the line and start a new one.

A maximum of four text lines can be entered. If is pressed after four lines have already been entered, the error message "4 LINE LIMIT!" will appear.

The number of text lines that can be printed on the installed tape depends on the tape width.

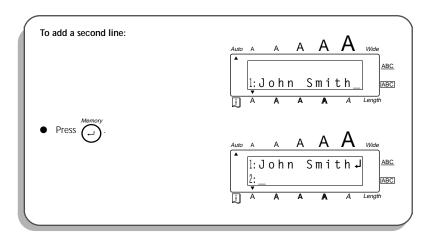
Tape widths	Maximum number of lines that can be printed
6 mm	1
9 mm	2
12 mm	2
18 mm	4

The return key can also be used to apply a selected item (e.g., when adding a symbol or accented character to the text or when starting an operation) or to answer "yes" when deleting a bar code.

To answer "no", press Refer to DELETE KEY on pages 25 to 26.

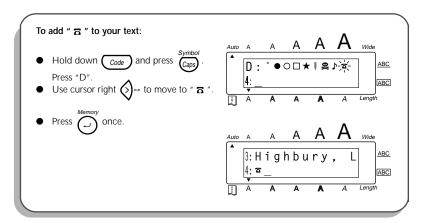
To add a new line:

- Press . The return mark () appears at the end of the line and the cursor moves to the new line.



To apply a selected item:

Press once.



DELETE KEY

The delete key (allows you to remove characters to the left of the cursor's current position. It differs from the left cursor key ((which only moves the cursor without deleting any characters.

The delete key can also be used to quit most functions and return to the previous display without changing the text.

The delete key cannot be used to quit the Bar code function. To quit the Bar code function, hold down Code and press N.

When deleting a bar code from the text, you will be asked to confirm the operation. In this case, pressing $\overset{Clear}{()}$ is like answering "no".

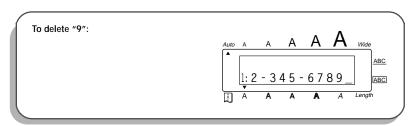
To answer "yes", press . Refer to RETURN KEY on pages 22 to 24.

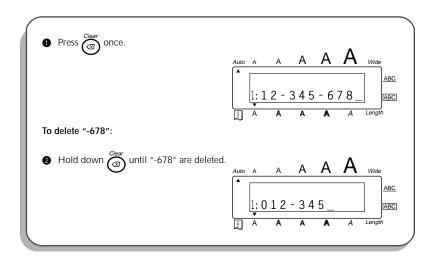
To delete one character:

- 2 Press (once.

To delete a sequence of characters:

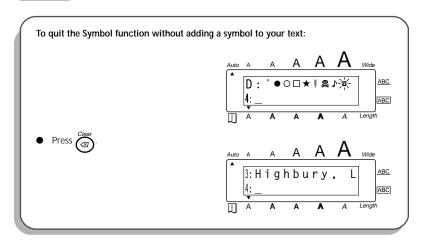
- 4 Hold down dutil all of the characters that you wish to delete are deleted.





To quit a function without changing your text:

Press to return to your text.

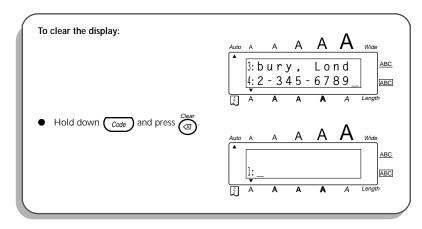


CLEAR FUNCTION

The Clear function is used to remove all characters from the display so that you can begin entering new text. Although all of the text is erased, the Caps mode and the character format settings (Size, Wide, Style, and the Underline and Frame functions) do not change.

To delete all of the text:

 \bullet Hold down $\begin{picture}(1,0) \put(0,0){\line(1,0){100}} \put(0,0){\$



COMPOSITE CHARACTER KEYS

When writing in other languages, composite characters, which consist of a letter and a diacritical mark, are often used. This machine can also display and print these characters. The diacritical marks available are ", ', ', ', and -.

The following diacritical mark and letter combinations are available:

Diacritical marks	Letters which can be combined			
	AEIOUaeiouy			
,	AEIOUCNRSYZaeioucnrsyz			
	AEIOUaeiou			
^	AEIOUaeiou			
-	ANOano			

Some of these composite characters can also be typed in directly while holding down code (refer to page 17) or can be entered using the Accent key (refer to pages 30 to 32).

To type in a composite character:

- Hold down <u>Code</u> and press the key of the desired diacritical mark. The diacritical mark is added to the text.
- Press the key of the letter that you wish to combine with the diacritical mark. The letter and the diacritical mark are added to the text.
 - If the letter of the key that you pressed cannot be combined with the diacritical mark (see the above table), only the letter is added to the text.

EXAMPLE

ACCENT FUNCTION

The Accent function can also be used to add accented characters to your text. The accented characters are grouped according to the uppercase or lowercase letter that they are combined with. The following accented characters are available:

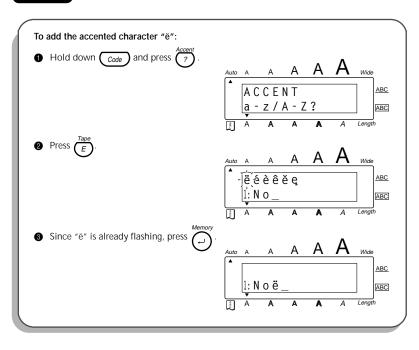
Letters	Accented characters	Letters	Accented characters
а	äáàâăãåąæ	0	ÖÓÒÔÕÔŐØŒ
А	ÄÁÀÂĂÃÅĄÆ	р	þ
С	çćč	Р	P
С	ÇĆČ	r	ŕř
d	d'đđ	R	ŔŘ
D	ĎĐ	S	śš
е	ë é è ê ě ę	S	ŚŠ
E	ËÉÈÊĔĘ	t	ťť
i	Ϊίìî	Т	т' Ť
I	ΪÍÌÎ	u	ü ú ù ů ű û
I	ľľł	U	ϋύὺὑΰΰ
L	ĽĽt	у	ÿý
n	ńñň	Υ	Ý
N	ŃÑŇ	Z	źżž
0	öóòôõôőøœ	Z	źżž

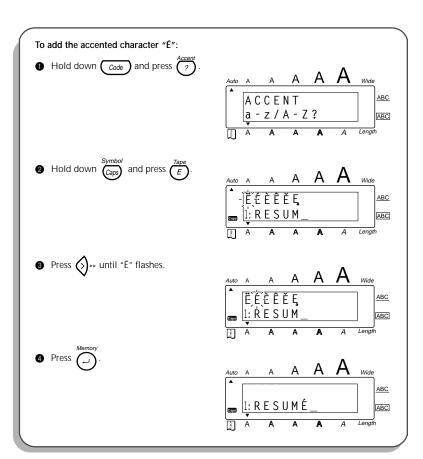
Some of these composite characters can also be typed in directly while holding down Code (refer to page 17) or can be entered using the composite character keys (refer to pages 28 to 29).

To type in an accented character:

- **2** Press the key for the letter of the desired accented character.
 - If you wish to type in an uppercase letter, press Gaps to enter Caps mode (the Caps indicator is lit) before pressing the letter key.

- Press . The accented character is added to the text.
 - To type in a sequence of accented characters, hold down code before pressing . Continue adding accented characters to your text by selecting them, then holding down code while pressing . Press just after the last character in the sequence is chosen.





SYMBOL FUNCTION

In addition to the letters, symbols and numerals on the key tops, there are 50 additional characters available with the Symbol function. These symbols are divided into five groups, corresponding to the letters A through F.

The following symbols are available:

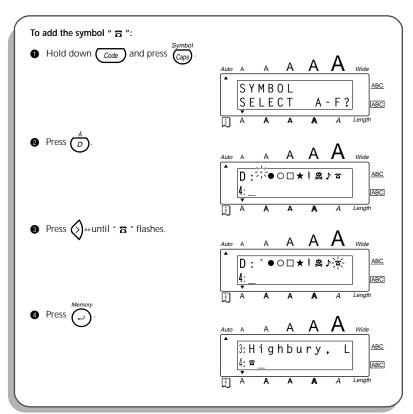
Group name	Symbols									
А	+	±	÷	×	=	%	[]	<	>
В	«	»	•	?	Ė	i	:	;	"	&
С	#	§	@	\	ß	a	0	μ	<u>./.</u>	ij
D	0	•	0		*	Į	8	>	5	
E	♂	φ	←	\rightarrow	↑	\	3	G		
F	€	£	DM	Fr	f	\$	¢			

To type in a symbol:

- Hold down Code and press Symbol. The message "SYMBOL SELECT A-F?" appears on the display.
- Press the key for the letter of the group containing the symbol that you want. The symbols in the selected group are displayed.
- - To type in a sequence of symbols, hold down code before pressing Continue adding symbols to your text by selecting them, then hold-

ing down \bigcirc while pressing \bigcirc . Press just \bigcirc after the last symbol in the sequence is chosen.





CURRENCY CONVERSION FUNCTION

By simply setting up the Currency conversion function once, you can quickly and easily convert one currency into another, add the two values to your text, and then print out the label in the format that you have selected.

PRINTER 102.23 € / DM 199,95

SETTING UP THE CURRENCY CONVERSION FUNCTION

General setup procedure:

- 1. Set up the first currency.
- 2. Set up the second currency.
- 3. Set up the print layout.
- 4. Apply the settings and exit the Currency conversion function.

To set up the first currency:

- Hold down Code and press (*1ST CURRENCY" is displayed.
 - To quit the Currency conversion function without changing any parameters, hold down \bigcirc and press \bigcirc .

To skip to the second currency setup, press $\stackrel{\text{Home}}{\diamondsuit}$ or $\stackrel{\text{Long}}{\diamondsuit}$ until "2ND CURRENCY" is displayed, and then continue with step 1.

To skip to the print layout setup, press $\stackrel{\text{Home}}{\longleftrightarrow}$ or $\stackrel{\text{Long}}{\longleftrightarrow}$ until "PRINT SETUP" is displayed, and then continue with step 6.

- Press (or ()»). "CURRENCY" is displayed.
 - Whenever " \leftarrow " is displayed to the left of a parameter, you can return to the previous parameter by pressing $\leftarrow \bigcirc$.
- Press Home or or until the desired currency is displayed.
 - The following currencies are available:

EURO, ATS (Austrian schilling), BEF (Belgian franc), DEM (German deutschemark), ESP (Spanish peseta), FIM (Finnish markka), FRF (French franc), IEP (Irish punt), ITL (Italian Iira), LUF (Luxembourg franc), NLG (Netherlands guilder), PTE (Portuguese escudo)

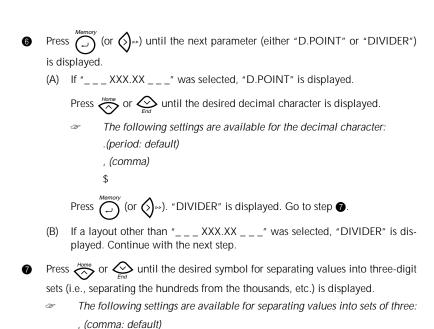
- ◆ Press (or (s) **). "LAYOUT" is displayed.
- **6** Press $\stackrel{\text{\tiny Home}}{\bigodot}$ or $\stackrel{\longleftarrow}{\bigodot}$ until the desired currency layout is displayed.
 - The first layout displayed is the default layout for the selected currency.

Currency	Default layout
EURO	XXX.XX €
ATS	öS XXX.XX
BEF	XXX.XXBEF
DEM	DM XXX.XX
ESP	XXXpta
FIM	XXX.XX mk
FRF	XXX.XX FF
IEP	IEPXXX.XX
ITL	L. XXX
LUF	XXX.XXLUF
NLG	fl XXX.XX
PTE	XXXEsc
ANY	XXX.XX

However, the following currency layouts are also available and can be edited:

XXX.XX	Maximum two decimal digits	€123.45 or
///////	Maximum two decimal digits	123.45 €
XXX	Whole number	L. 123
XXXXX	Maximum two digits for fractional currency	FF 123 c45
XXXXX	Maximum two digits for fractional currency	123DM 45 Pf

Each "X" represents a digit and the spaces can be filled with any character, including accented characters and symbols.



(period)(bullet)SPACE' (apostrophe)NONE (no symbol)

- Press or continue the setup) or "NO" (to exit the setup).
 - In order to convert currencies automatically, two currencies must be set up.
- Press Memory
 - If "YES" was selected, "2ND CURRENCY" is displayed. If "NO" was selected, "EXIT SETUP" is displayed.

To set up the second currency:

- With "2ND CURRENCY" displayed, press (or ♦) → (or ♦)
- Press Home or until the desired currency is displayed.
 - In addition to the currency settings listed in step ③, "ANY" is available, allowing you to convert to any other currency after entering the corresponding exchange rate.
- - (A) If a currency setting other than "ANY" was selected, go to step (4).
 - (B) If "ANY" was selected as the second currency, "RATE" is displayed.

Press $\stackrel{\text{Home}}{\bigodot}$ or $\stackrel{\text{Lond}}{\bigodot}$ to select the direction of the conversion (either to or from the euro), and then type in the current exchange rate to or from the euro.

Up to 10 digits can be entered. to or from the euro.

Entering an exchange rate based on the euro makes it possible to convert automatically between the new currency (ANY) and any of the other currencies.

Continue with the next step.

- Repeat steps 5 through 9 until all parameters for the second currency are set as you wish.
- Press Memory
 - If "YES" was selected, "PRINT SETUP" is displayed. If "NO" was selected, "EXIT SETUP" is displayed.

To set up the print layout:

- With "PRINT SETUP" displayed, press ^{Memory} (or ⟨S)→). "CURRENCY" is displayed.
- Press $\stackrel{\text{Home}}{\Longleftrightarrow}$ or $\stackrel{\text{Loc}}{\Longleftrightarrow}$ to select whether to print the first currency (Y) or not (N).
- Press $\bigcap_{n=0}^{Memory}$ (or $\bigotimes_{n=0}^{\infty}$) to select the second currency.
- - If both currencies are set to "Y", "SEPARATOR" is displayed. If either currency is set to "N", "EXIT SETUP" is displayed.

4	With "SEPARATOR" displayed, press	Home	or	⊘ End	until	the	desired	symbol	for
	separating the currencies is displayed.								

The following separator settings are available:

/ (slash: default)

: (colon)

; (semi-colon)

- (dash)

SPACE

(return)

- Press or (or (\$).»). "EXIT SETUP" is displayed.
- Press to apply the settings and exit the Currency conversion function setup.
 - If is not pressed while "EXIT SETUP" is displayed, the new setup will be lost.

USING THE CURRENCY CONVERSION FUNCTION

To convert currencies:

● Press (). The two setup currencies are displayed.

Type in the value that you wish to convert.

Up to 10 digits can be entered.

To change the direction for calculating the currencies, press of that the arrow points in the desired direction.

- Press . The value is converted and both currencies are added to the text.
 - The preset currencies are calculated based on the following rates:

Currency	Conversion rate (1 € =)				
EURO	1				
ATS	13.7603				
BEF	40.3399				
DEM	1.95583				
ESP	166.386				
FIM	5.94573				
FRF	6.55957				
IEP	0.787564				
ITL	1936.27				
LUF	40.3399				
NLG	2.20371				
PTE	200.482				



To set up the Currency conversion function to convert between euros and deutschemark:

This example will work exactly as described only if none of the settings in the Currency conversion function have been changed yet.

Hold down Code and press



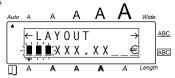


Press (or () »»).



3 Since "EURO" is already selected, press



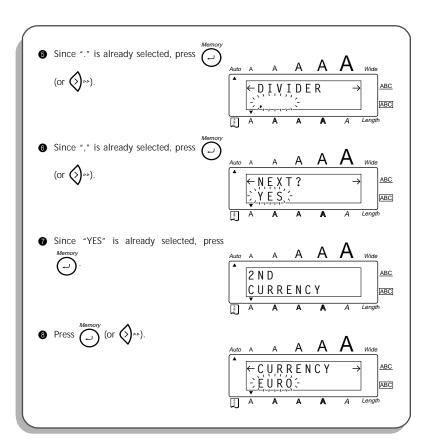


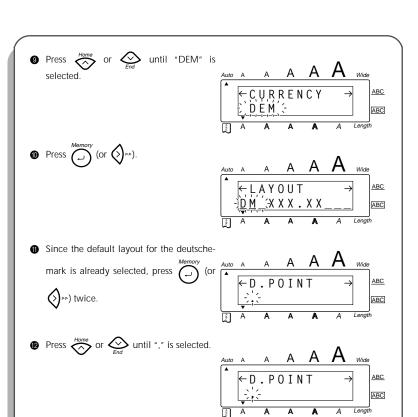
4 Since the default layout for the euro is

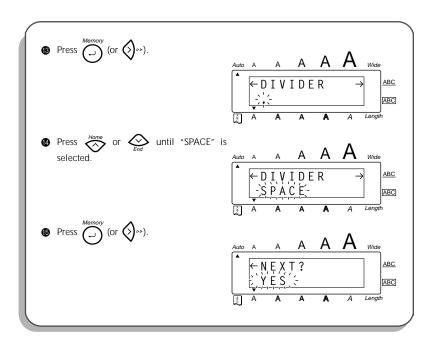
already selected, press twice.

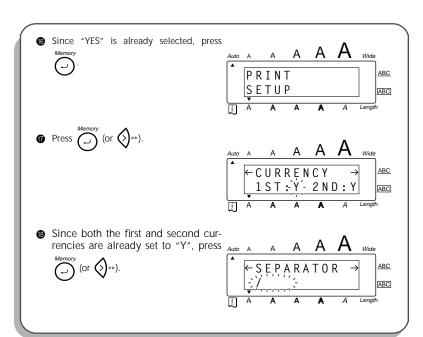














To make a price tag using the Currency conversion function to convert from deutschemark to euros:

1 Type "PRINTER", then press



Press (€)



3 Press $\triangleleft \triangleleft$ so that " \rightarrow " changes to " \leftarrow ".

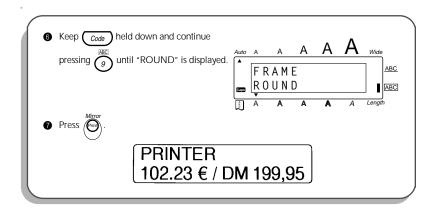


4 Type "199.95".



6 Press —





LENGTH FUNCTION

Although the length of the printed label automatically adjusts to fit the length of the entered text, there may be times when you will want to make a label with a specific length. With this function, various settings are available which allow you to set the label length between 5.0 cm and 30.0 cm. When the Length function is first selected, the length of the label (the text and both margins) is briefly displayed.

The default Length setting is OFF and the default label length is 10.0 cm. If ON is selected, the Length indicator below the display lights up.

Turning off the machine and then turning it on again changes the length setting back to OFF.

To change the Length setting:

- Hold down code and press once. The length of the current label briefly appears on the display in centimetres.
- Keep Code held down and continue pressing appears.
 Length
 until the desired setting
 - To turn on the Length function, select "ON". To turn off the Length function, select "OFF".
- Release Code . If "ON" was selected, the current label length is displayed.

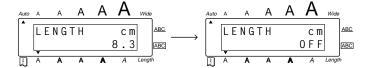
To set the length of the label:

- **4** Press $\stackrel{\text{Home}}{\bigodot}$ or $\stackrel{\text{Lend}}{\bigodot}$ to select the desired length or use the number keys to enter the length.
 - To change the number values in 1.0-cm steps, hold down either $\stackrel{\text{Home}}{\longleftrightarrow}$ or $\underset{\text{End}}{\bigodot}$, then release the key when the desired setting is displayed.
- Press Memory .

EXAMPLE

To select a label length of 10.2 cm:

 $\bullet \quad \text{Hold down } \underbrace{Code}_{Q} \text{ and press } \underbrace{Q}^{\text{Length}}_{Q} \text{ once.}$



2 Keep \bigcirc held down and continue pressing \bigcirc until "ON" is displayed.



3 Release Code



Press until setting 10.2 is displayed.



SIZE & WIDE FUNCTIONS

The character size can be adjusted using both the Size and Wide functions. All characters in the text will be printed in the selected character size.

With the AUTO Size setting, the machine compares your text with the width of the installed tape and automatically adjusts the characters to the largest possible size. However, five other point sizes are also available and each can be printed in wide characters.

Size settings (in points)	Wide function OFF	Wide function ON
10 (A)	ABC	ABC
13 (_A)	ABC	ABC
19 (A)	ABC	ABC
26 (A)	ABC	ABC
38 (A)	ABC	ABC

The default Size setting is AUTO and the default Wide setting is OFF. The currently selected Size setting is always shown by the indicators above the display. If the ON Wide setting is selected, the Wide indicator above the display lights up.

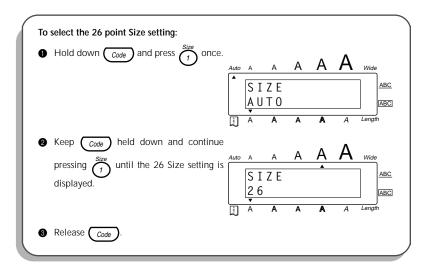
Since the character size that can be used depends on the width of the tape, the following table shows the character sizes that can be used with each tape width.

Tape widths	Sizes (in points)
6 mm	10, 13
9 mm	10, 13, 19
12 mm	10, 13, 19, 26
18 mm	10, 13, 19, 26, 38

To change the Size setting:

- Hold down code and press size once. The currently selected Size setting appears in the display.
 - The indicators above the display also show the current Size setting.
- Keep Code held down and continue pressing tuntil the desired setting appears in the display and is shown by the indicators above the display.
- Release to apply the selected Size setting to all of the characters in the text.

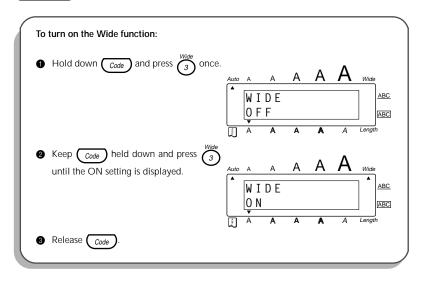
EXAMPLE



To change the Wide setting:

- lacktriangledown Hold down lacktriangledown and press lacktriangledown once. The currently selected Wide setting appears in the display.
- Keep Code held down and continue pressing wide until the desired setting appears in the display.
- Release on apply the selected Wide setting to all of the characters in the text.
 - The Wide indicator lights up if the ON setting is selected.

EXAMPLE



STYLE FUNCTION

You can choose to apply one of nine different character styles to create a more decorative label.

The following Style settings are available:





OUTLINE (A)



BOLD (A)



SHADOW (A)



VERTICAL (1)



ITALIC (A)



I+OUTLINE (A + A) [italic & outline]



I+BOLD (A + A)
[italic & bold]



I+SHADOW (A + A) [italic & shadow]



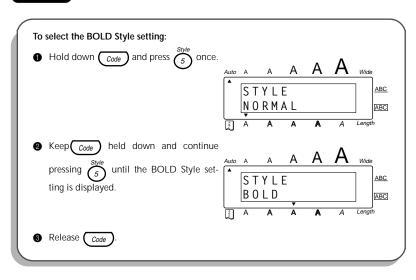
The default Style setting is NORMAL. The currently selected Style setting is always shown by the indicators below the display.

Characters printed using the smaller sizes may be difficult to read if certain Style settings (e.g., I+SHADOW) are selected.

To change the Style setting:

- lacktriangledown Hold down lacktriangledown and press lacktriangledown once. The currently selected Style setting appears in the display.
- Keep held down and continue pressing until the desired setting appears in the display.
- Release Code to apply the selected Style setting to all of the characters in the text.
 - The indicators below the display also show the current Style setting.

EXAMPLE



UNDERLINE FUNCTION

You can underline your entire text in order to emphasise it.

The following Underline settings are available:





The default Underline setting is OFF. If ON is selected, the Underline indicator (<u>ABC</u>) on the right side of the display lights up.

If a frame has been chosen when the ON Underline setting is selected, the Frame setting changes back to OFF and the text is underlined.

To change the Underline setting:

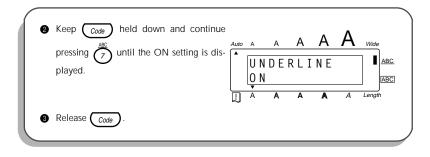
- Hold down code and press once. The currently selected Underline setting appears in the display.
- Keep <u>Code</u> held down and continue pressing <u>7</u> until the desired setting appears in the display.
- Release to apply the selected Underline setting to all of the characters in the text.
 - The Underline indicator (<u>ABC</u>) lights up if ON is selected.

EXAMPLE

To select the ON Underline setting:

• Hold down Code and press once.

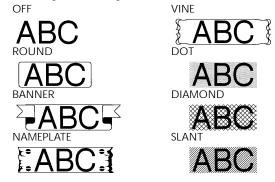




FRAME FUNCTION

With the Frame function, you can choose from various frames and highlights for decorating your label.

The following Frame settings are available:



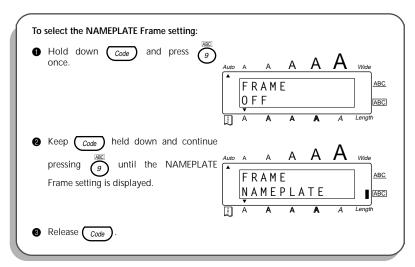
The default Frame setting is OFF. If any setting other than OFF is selected, the Frame indicator ($\boxed{\mathtt{ABC}}$) on the right side of the display lights up.

If the ON Underline setting has been chosen when a frame is selected, the Underline setting changes back to OFF and the text is framed.

To change the Frame setting:

- Hold down <u>Code</u> and press <u>9</u> once. The currently selected Frame setting appears in the display.
- Keep Code held down and continue pressing until the desired setting appears in the display.
- Release Code to apply the selected Frame setting to the entire text.
 - The Frame indicator lights up if any setting other than OFF is selected.

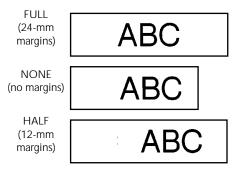




TAPE FEED FUNCTION

The Tape feed function allows you to adjust the size of the blank spaces on the left and right sides of your text. In addition, the NONE Tape feed setting can be used to print one label with many different format styles.

The following Tape feed settings are available:



The default Tape feed setting is FULL.

If an instant-lettering (rub-on) or iron-on tape cassette is installed, the text will be printed with the FULL setting (24-mm margins), even if a different Tape feed setting is selected.

After printing a label using the NONE Tape feed setting, hold down Code and presss — once to feed the tape before pressing in the tape cutter lever to cut it, otherwise some of the printed characters may be cut off as shown below.

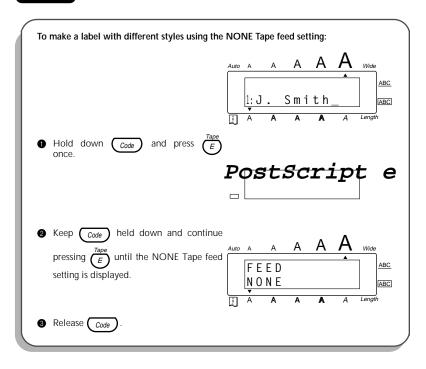


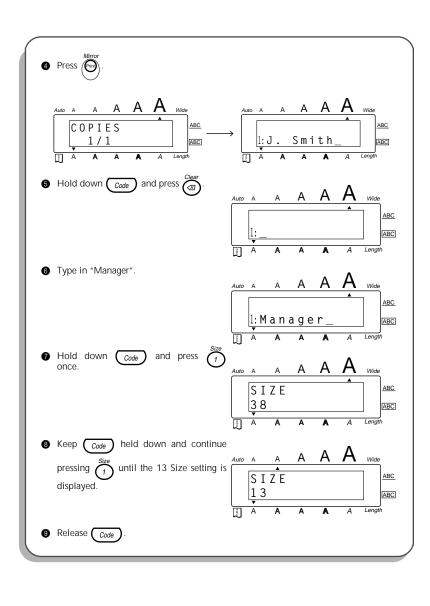
After printing using the HALF Tape feed setting, press in the tape cutter lever to cut off the label, then use scissors to cut along the printed dots (:) to centre the text within the label.

To change the Tape feed setting:

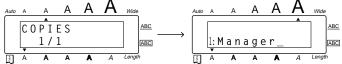
- Hold down \underbrace{Code} and press \underbrace{E} once. The currently selected Tape feed setting appears in the display.
- Reep \underbrace{Code} held down and continue pressing \underbrace{E} until the desired setting appears in the display.
- 3 Release Code to apply the selected Tape feed setting to the entire text.

EXAMPLE





Press Print



Hold down Code and press Auto A A A A A Wide FEED

Auto A A A A A A A B Wide ABC

Press in the tape cutter lever to cut the tape.

J. Smith

Manager

HORIZONTAL ALIGNMENT FUNCTION

You can choose to align the characters in the text in one of three ways. In addition, if the Length function was used to set the length of the label, the text will align within the label according to the selected Horizontal alignment setting.

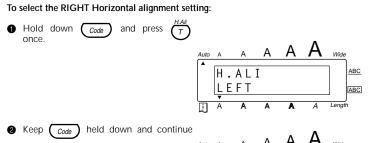
The following Horizontal alignment settings are available:

The default Horizontal alignment setting is LEFT.

To change the Horizontal alignment setting:

- Hold down Code and press T once. The currently selected Horizontal alignment setting appears in the display.
- Keep <u>Code</u> held down and continue pressing <u>HAW</u> until the desired setting appears in the display.





Keep Code held down and continue pressing T until the RIGHT Horizontal alignment setting is displayed.



3 Release Code

MIRROR PRINTING FUNCTION

With this function, you can print your text so that the characters can be read from the adhesive side of the tape. If mirror-printed labels are attached to glass, such as a showroom window or some other clear material, the text can be read correctly from the opposite side.





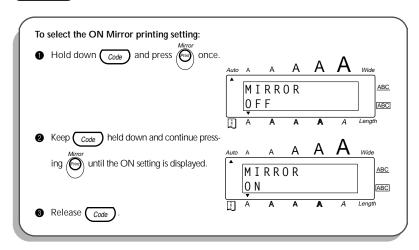
The default Mirror printing setting is OFF.

When using the Mirror printing function, the text should be printed on clear tape.

To change the Mirror printing setting:

- Hold down Code and press once. The currently selected Mirror printing setting appears in the display.
- Keep Code held down and continue pressing until the desired setting appears in the display.
- **3** Release Code to apply the selected Mirror printing setting to the entire text.

EXAMPLE



This function is designated for use with a clear tape.

BAR CODE FUNCTION

The Bar code function, which enables bar codes to be printed as part of labels, is one of this machine's most advanced features.

This section will explain how to enter a bar code into your text. It is not intended as a comprehensive introduction to the concept of bar coding. For more detailed information, please consult one of the many reference books available.

Since this machine is not specifically designed for special bar code label making, some bar code readers may not be able to read the labels.

Print bar codes with black ink on a white background.

Four different parameters enable you to create custom bar codes.

PARAMETER	SETTINGS
ТҮРЕ	CODE 39, I-2/5, EAN 13, EAN 8, UPC-A, UPC-E,
	CODABAR
WIDTH (bar code width)	LARGE, SMALL
UNDER# (numbers printed below bar code)	ON, OFF
CH. DIG. (check digit)	OFF, ON

The default settings are CODE 39 TYPE, LARGE WIDTH, ON UNDER# and OFF CH. DIG.

We recommend printing bar codes using the FULL Tape feed setting and the LARGE bar code width. Bar codes printed using a smaller Tape feed setting or a SMALL bar code width may be difficult to read.

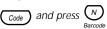
To enter Bar code mode:

• Hold down Code and press	N Barcode
----------------------------	--------------

If the cursor was located below a bar code mark, the current bar code data will be displayed.

A label can only contain one bar code. If a bar code has already been entered when Code is held down and Narcode is pressed, the error message "1 BAR LIMIT!" will appear.

To quit the Bar code function without making any changes, hold down



2 Enter or edit the bar code data.

To change the bar code parameter settings:

- Press Home
 - To return to the bar code data display without changing any parameter settings, press (a).
- 6 Press or until the desired setting is displayed.
- 6 Repeat steps 4 and 5 until all parameters are set as you wish.
- Press Memory

To add a special character to the bar code data:

- Press of or or until the cursor is below the character immediately to the right of where you want to add the special character.
- 9 Hold down Code and press Symbol Caps
- Press $\stackrel{\text{Home}}{\Longleftrightarrow}$ or $\stackrel{\text{Constant}}{\Longleftrightarrow}$ until the desired special character is displayed.
 - The following special characters can only be entered when using types CODE 39 or CODABAR.

Symbol	Character
1	+
2	\$

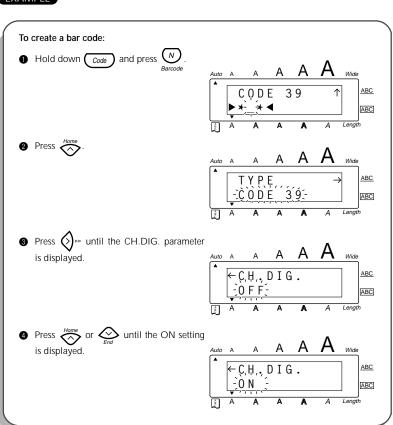
Press to add the selected special character to the bar code data.

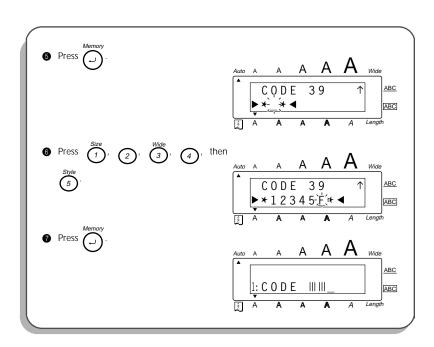
To add the bar code to your text:

Press Memory

To delete the bar code from your text:

- Press $\langle \cdot \rangle$, $\langle \cdot \rangle$, $\langle \cdot \rangle$ or $\langle \cdot \rangle$ until the cursor is positioned either below the right bar code mark or immediately to the right of the second bar code mark.
- Press Clear The message "OK TO CLEAR? ||| ||| ".
- Press (...).





PRINT KEY & FEED FUNCTION

After you have entered your text and chosen the desired format settings, you are ready to print the label.

To print a label:

- Press . The message "COPIES 1/1" is displayed while the label is printed. The label comes out of the tape exit slot in the top end of the machine.
- After printing using the NONE Tape feed setting, hold down Code and press

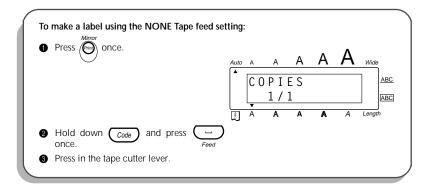
 once to feed the tape before cutting it, otherwise some of the printed characters may be cut off.

To feed the tape:

Hold down Code and press -. The message "FEED" appears while 24 mm of tape is fed out.

To cut the tape:

- Press in the tape cutter lever.
- In order to prevent damaging the tape, do not try to cut it while printing or feeding. Pressing in the tape cutter lever too far may break it.



NUMBERING FUNCTION

This function can be used to print many copies of the same text while increasing a certain number in the text by 1 after each label is printed.

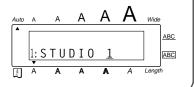
To use the Numbering function:

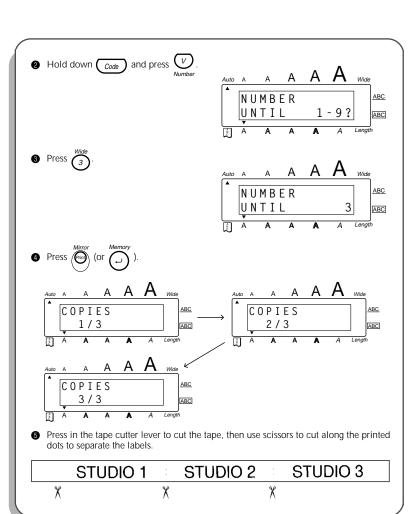
- Press « , , , , , , , or or or to position the cursor below the number that you wish to increase.
- Hold down Code and press Number. The message "NUMBER UNTIL 1–9?" appears in the display.
- **9** Press the number key ($\frac{Size}{1}$ to $\frac{Size}{9}$) of the last number that is to be printed.
 - To quit the Numbering function without printing, hold down \bigcirc and press \bigvee_{Number} (or press just \bigcirc).
- Press (or (or)) to begin printing the labels. The number of each copy is displayed while it is being printed.
 - After printing using the NONE Tape feed setting, hold down code and press once to feed the tape before cutting it, otherwise some of the printed characters may be cut off.
- Press in the tape cutter lever to cut the tape, then use scissors to cut along the printed dots to separate the labels.

EXAMPLE

To print three labels with numbers 1, 2 and 3:

Position the cursor below "1".



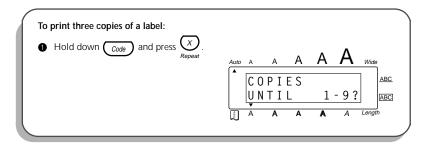


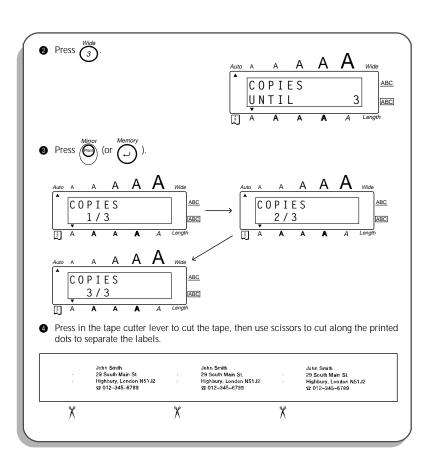
REPEAT PRINTING FUNCTION

This function allows you to print up to 9 copies of the same text.

To use the Repeat printing function:

- Hold down \bigcirc and press \bigcirc . The message "COPIES UNTIL 1–9?" appears in the display.
- Press the number key ($\frac{\text{Size}}{1}$ to $\frac{\text{(PRC)}}{9}$) of the number of labels that you want.
 - To quit the Repeat printing function without printing, hold down \bigcirc and press \bigcirc (or press just \bigcirc).
- Press (or (or) to begin printing the labels. The number of each copy is displayed while it is being printed.
 - After printing using the NONE Tape feed setting, hold down code and press once to feed the tape before cutting it, otherwise some of the printed characters may be cut off.
- Press in the tape cutter lever to cut the tape, then use scissors to cut along the printed dots to separate the labels.





MEMORY FUNCTIONS

You can use the memory to store your most frequently used text files. The text remains in the memory, even after all characters are removed from the display using the Clear

function (holding down \bigcirc and pressing \bigcirc).

When each file is stored, it is given a number to make recalling it easier. Up to 9 text files or about 300 characters can be stored in the memory. Each stored text file can have a maximum of 99 characters.

Since a copy of the stored text file is recalled when the Recall function is used, the text can be edited or printed without changing the originally stored file. When a file is no longer needed or more space is necessary, the Memory delete function can be used to delete it

When inserting new batteries, be sure to insert the new ones within five minutes of removing the old ones, otherwise any text files stored in the memory will be lost (unless the machine is plugged into an electrical outlet with the AC adapter).

STORING TEXT

To store a text file:

- Hold down Code and press Memory
- Press . The message "STORE SELECT 1–9?" appears on the display.
 - If 300 characters have already been stored, the error message "MEMORY FULL!" appears in the display. If this occurs, an existing text file must be deleted before the new one can be stored.
- Press the number key (to to g)) of the file number where you wish to store the text. The text is stored under the selected file number and the text previously shown in the display reappears.
 - If a file is already stored under the selected file number, the message "OVERWRITE?" appears in the display and you must decide whether or not to overwrite it (delete it from the memory and store the new one).

To quit the Store function without storing the text, hold down code and

press \bigcirc (or press just \bigcirc).

To overwrite the stored file with the new one:

- Press to delete the previously stored file and store the new one under the selected number.
 - To go back and choose another file number without overwriting the text file, press (3), then press the number key of a different file number.

RECALLING TEXT

To recall a text file:

- 1 Hold down Code and press Memory.
- Press Memory The message "RECALL SELECT 1–9?" appears on the display.

To display the text stored under other file numbers, press $\stackrel{\text{Home}}{\Longleftrightarrow}$ or $\stackrel{\text{End}}{\Longleftrightarrow}$, or the number key of a different file number.

To quit the Recall function without recalling the text file, hold down

- (Code) and press (I) (or press just (I)).
- Press . Any text previously entered in the display is erased and the text stored under the selected file number is recalled into the display.

DELETING A FILE

To delete a text file:

- Hold down Code and press Memory
- Press

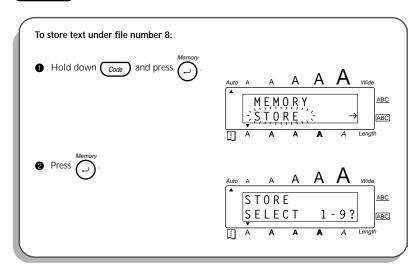
 √ or
 → until "CLEAR" flashes on the display.

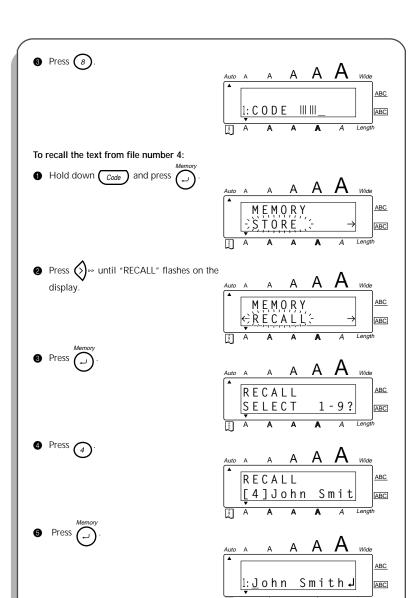
- Press . The message "CLEAR SELECT 1–9?" appears on the display.
- Press the number key ($\frac{S_{ZP}}{1}$ to $\frac{S_{ZP}}{9}$) of the file number containing the text that you wish to delete. The text stored under the selected file number is shown.
 - $\ensuremath{\mathscr{T}}$ To see other parts of the selected text file, press $\ensuremath{\leadsto}$ or $\ensuremath{\bigodot}$ $\ensuremath{\leadsto}$.

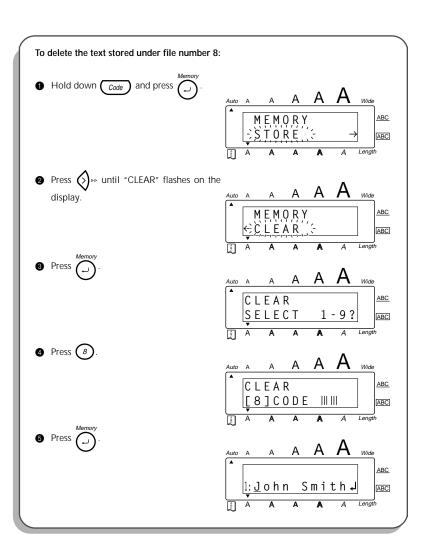
To display the text stored under other file numbers, press $\stackrel{\text{Home}}{\Longleftrightarrow}$ or $\stackrel{\text{Lond}}{\Longleftrightarrow}$, or the number key of a different file number.

To quit the Memory delete function without deleting the text file, hold down \bigcirc and press \bigcirc (or press just \bigcirc).

6 Press to delete the text file that was selected.







TROUBLESHOOTING

Problem	Remedy
The display stays blank after you have turned on the machine.	Check that the AC adapter is connected correctly. Ensure the correct AC adapter is used. If you are using alkaline batteries, check that they are correctly inserted. If the batteries are low, replace them with new ones.
The machine does not print or the printed characters are blurred.	 Check that the tape cassette has been inserted properly. If the tape cassette is empty, replace it with a new one. Make sure that the back cover has been attached. Ensure the correct AC adapter is used. Check that the AC adapter is connected correctly. If the batteries are low, replace them with new ones.
The text files that you stored in the memory are no longer there.	If the batteries are low, replace them with new ones.
The printed characters are not formed properly.	If you are using alkaline batteries, they may be low. Try using the AC adapter or replace the batteries with new ones.
A blank horizontal white line appears through the printed label.	Clean the print head as explained on page 12.
6. Striped tape appears.	You have reached the end of the tape. Replace the tape cassette with a new one.
7. The machine has "locked up" (i.e., nothing happens when a key is pressed).	Turn off the machine, then while holding down Code and S, turn the machine back on. The text and formats in the display and all text files stored in the memory are erased.

ERROR MESSAGE LIST

Error Message	Cause	Remedy
1 BAR LIMIT!	This message appears if a bar code already exists when you hold down Code and press N. Barcode.	Limit the number of bar codes in the text to one.
4 DIGIT MIN.	This message appears when less than the minimum four digits are entered when making a bar code.	Enter a minimum of four digits before pressing
4 LINE LIMIT!	This message appears if four lines already exist when you press Memory	Limit the number of lines to four.
BATTERIES WEAK	This message appears when the installed alkaline batteries become weak.	Replace the batteries or use the AC adapter.
BUFFER EMPTY!	This message appears if you press some func- tion keys, but no text has been entered in the display.	Enter some text before starting the function.
	This message appears if you try to print, but no text has been entered.	Enter text before printing.
	This message appears if you try to store a text file in the memory, but no text has been entered in the display.	Enter text before storing.

Error Message	Cause	Remedy
BUFFER FULL!	This message appears if you try to enter a character, symbol, bar code, return or space after 99 characters have already been entered.	Delete some existing text so that more can be entered.
INPUT ABCD AT BEGIN&END	This message appears if a letter between A and D has not been entered at the beginning and end of the bar code when the CODABAR bar code type is used.	Enter a letter between A and D at the beginning and end of the bar code.
INPUT WHOLE CODE	This message appears if the set number of digits are not entered while inputting the bar code data.	Input the correct number of digits.
LENGTH LIMIT!	This message appears if the Length function is used to set a label length that is less than 5.0 cm or more than 30.0 cm.	Set the label length between 5.0 and 30.0 cm.
LINE LIMIT!	This message appears if the number of lines in the text is greater than the maximum number of lines possible for the installed tape.	Reduce the number of lines or install a wider tape.
MEMORY FULL!	This message appears if you try to store a text file after 300 charac- ters have already been stored in the memory.	Delete an unwanted file to make room for the new one.

Error Message	Cause	Remedy
NO FILES!	This message appears if you try to recall or delete a text file from the memory when none are stored.	Store a text file first.
NOT HERE!	This message appears if a character, symbol, space or return is entered while the cursor is located below the right part of a bar code mark. This message appears if the cursor is not below a number when you hold down code and press Number.	Move the cursor or delete the bar code before entering the character, symbol or return. Move the cursor below a number before holding down Code and pressing Number
NUMBER TOO SMALL!	This message appears if the last number that is set to be printed is less than the selected number in the text.	Press the key of a number that is greater than the number in the text.
OVERFLOW	This message appears if the Currency conver- sion function is used to convert a price into a number containing more than 12 digits.	Enter a price that does not convert into a number containing more than 12 gigits.
RAM PROBLEM!	This message appears if there is a problem with the machine's random access mem- ory.	Contact your service representative.

Error Message	Cause	Remedy
REPLACE BATTERIES!	This message appears if the installed alka- line batteries are about to run out.	Replace the batteries or use the AC adapter.
ROM PROBLEM!	This message appears if there is a problem with the machine's read only memory.	Contact your service representative.
SYSTEM ERROR!	This message appears if there is a problem with the machine's software.	Contact your service representative.
TAPE EMPTY!	This message appears if you try to print a label or feed the tape when a tape cassette is not installed.	Install a tape cassette and try again.
TEXT HIGH!	This message appears if the size of the text is larger than the width of the installed tape.	Reduce the size of the characters or install a wider tape.
TEXT LONG!	This message appears if the length of the text is longer than the label length that has been set using the Length function.	Delete some of the text, reduce the char- acter width or increase the set label length.
WRONG ADAPTER	This message appears if a high-voltage adapter is being used.	Disconnect the high- voltage adapter and connect the adapter designed exclusively for this machine.
WRONG CHAR!	This message appears if any characters other than numbers are selected in the num- bering field.	Only select numbers in the numbering field.

SPECIFICATIONS

HARDWARE

Input device: Keyboard with 52 keys

LCD: 7×5 dots

12 characters 2 line

17 indicators

Print tape: Pressure-sensitive, adhesive-based

8 m long

Four widths available:

6 mm 9 mm 12 mm 18 mm

Power supply: Six AA alkaline batteries (AM3, LR6) or optional AC

adapter

Auto power-off if no key is pressed for 5 minutes

Print head: 128 dot / 180 dpi

Dimensions: 121 (W) \times 190 (D) \times 71 (H) mm

Weight: 520 g (without a tape cassette and batteries installed)

SOFTWARE

Buffer size: Maximum 99 characters

Maximum four lines

Memory size: 300 characters

Character size: Five sizes (10, 13, 19, 26 and 38 points) + AUTO

All are available in normal and WIDF

Print styles: Normal, Outline, Bold, Shadow (each can be combined

with Italic), and Vertical

ACCESSORIES

Supplies

Obtain tape cassettes and AC adapters from your nearest authorised dealer. Brother cannot be held responsible for trouble caused by the use of unauthorised supplies. Use only Brother TZ tapes with this machine. Do not use tapes that do not have the TE mark.

Stock no.	Description		
18 mm laminated	18 mm laminated tapes		
TZ-141	Black characters on clear adhesive		
TZ-241	Black characters on white adhesive		
TZ-242	Red characters on white adhesive		
TZ-243	Blue characters on white adhesive		
TZ-344	Gold characters on black adhesive		
TZ-345	White characters on black adhesive		
TZ-441	Black characters on red adhesive		
TZ-541	Black characters on blue adhesive		
TZ-641	Black characters on yellow adhesive		
TZ-741	Black characters on green adhesive		
12 mm laminated	t tapes		
TZ-131	Black characters on clear adhesive		
TZ-132	Red characters on clear adhesive		
TZ-133	Blue characters on clear adhesive		
TZ-135	White characters on clear adhesive		
TZ-231	Black characters on white adhesive		
TZ-232	Red characters on white adhesive		
TZ-233	Blue characters on white adhesive		
TZ-334	Gold characters on black adhesive		
TZ-335	White characters on black adhesive		
TZ-431	Black characters on red adhesive		
TZ-435	White characters on red adhesive		
TZ-531	Black characters on blue adhesive		
TZ-535	White characters on blue adhesive		
TZ-631	Black characters on yellow adhesive		
TZ-635	White characters on orange adhesive		
TZ-731	Black characters on green adhesive		
TZ-735	White characters on green adhesive		

Stock no.	Description	
TZ-B31	Black characters on fluorescent orange adhesive	
TZ-C31	Black characters on fluorescent yellow adhesive	
TZ-D31	Black characters on fluorescent green adhesive	
TZ-M31	Black characters on clear (mat) adhesive	
9 mm laminated	tapes	
TZ-121	Black characters on clear adhesive	
TZ-122	Red characters on clear adhesive	
TZ-123	Blue characters on clear adhesive	
TZ-221	Black characters on white adhesive	
TZ-222	Red characters on white adhesive	
TZ-223	Blue characters on white adhesive	
TZ-324	Gold characters on black adhesive	
TZ-325	White characters on black adhesive	
TZ-421	Black characters on red adhesive	
TZ-521	Black characters on blue adhesive	
TZ-621	Black characters on yellow adhesive	
TZ-721	Black characters on green adhesive	
TZ-M21	Black characters on clear (mat) adhesive	
6 mm laminated	tapes	
TZ-111	Black characters on clear adhesive	
TZ-211	Black characters on white adhesive	
TZ-315	White characters on black adhesive	
TZ-611	Black characters on yellow adhesive	
18 mm non-laminated tapes		
TZ-N241	Black characters on white adhesive	
TZ-N242	Red characters on white adhesive	
TZ-N243	Blue characters on white adhesive	
TZ-N541	Black characters on blue adhesive	
TZ-N641	Black characters on yellow adhesive	
TZ-N741	Black characters on green adhesive	
TZ-NF41	Black characters on purple adhesive	
TZ-PC41	Black characters on adhesive with a Christmas design	
TZ-PH41	Black characters on adhesive with a heart design	
TZ-PF41	Black characters on adhesive with a fruit design	
TZ-PM41	Black characters on adhesive with a marine design	
TZ-N841	Black characters on gold adhesive	

Stock no.	Description
12 mm non-laminated tapes	
TZ-N231	Black characters on white adhesive
TZ-N232	Red characters on white adhesive
TZ-N233	Blue characters on white adhesive
TZ-N531	Black characters on blue adhesive
TZ-N631	Black characters on yellow adhesive
TZ-N731	Black characters on green adhesive
TZ-NF31	Black characters on purple adhesive
9 mm non-laminated tapes	
TZ-N221	Black characters on white adhesive
6 mm non-laminated tapes	
TZ-N211	Black characters on white adhesive
Special tapes	
TZ-L041	18 mm instant lettering tape
TZ-IY41	18 mm iron-on transfer tape
TZ-SE4	18 mm security tape
TZ-FA3	12 mm fabric tape

STAMP TAPES

Stock No.	Description
SH-MB	Stamper for Medium black
SK-MB	Stamp making kit for medium black

Quick guide	
To set up the Currency conversion function:	
0	Hold down Code and press Entry
2	With "1ST CURRENCY" displayed, press (or (\$) ->).
0	Press $\stackrel{\text{\tiny Hemory}}{\Longleftrightarrow}$ or $\stackrel{\text{\tiny Lemory}}{\Longleftrightarrow}$ to select the first currency, and then press $\stackrel{\text{\tiny Memory}}{\bigodot}$ (or $\stackrel{\text{\tiny Q}}{\diamondsuit}$).
4	Press $\stackrel{\text{\tiny Hampe}}{\bigodot}$ or $\stackrel{\triangle}{\bigodot}$ to select the currency layout, and then press $\stackrel{\text{\tiny Memory}}{\bigodot}$ (or $\stackrel{\triangle}{\bigodot}$).
6	If "XXX.XX" was selected, press 💮 or 😂 to select the decimal character, and then
	press (or ♦).
	If any other layout was selected, continue with the next step.
6	Press $\stackrel{\text{\tiny Home}}{\bigodot}$ or $\bigodot_{\text{\tiny End}}$ to select the divider, and then press \bigodot (or \bigodot) $\circ\circ$).
0	Press $\stackrel{\text{\tiny Homev}}{\bigodot}$ or $\stackrel{\textstyle \bigodot}{\operatornamewithlimits{\it End}}$ to select "YES", and then press $\stackrel{\tiny \text{\tiny Memory}}{\bigodot}$.
8	With "2ND CURRENCY" displayed, press ⊕ (or ♦)
9	Press $\stackrel{\text{\tiny Homeo}}{\Longleftrightarrow}$ or $\stackrel{\text{\tiny Const.}}{\rightleftharpoons}$ to select the second currency, and then press $\stackrel{\text{\tiny Memory}}{\smile}$ (or $\stackrel{\text{\tiny None}}{\diamondsuit}$).
•	If a currency other than "ANY" was selected, go to step 6 .
	If "ANY" was selected, enter the exchange rate, and then press (or (or ()->-).
	To change the direction of the exchange, press $\stackrel{\text{\tiny Home}}{\Longleftrightarrow}$ or $\stackrel{\triangleright}{\bigotimes}$.
•	Repeat steps 4 through 7 to finish setting up the second currency.
@	With "PRINT SETUP" displayed, press (or 💮).
₿	Press $\stackrel{\text{\tiny Home}}{\bigodot}$ or $\stackrel{\textstyle c}{\bigodot}$ to select "Y", and then press $\stackrel{\tiny \text{\tiny Memory}}{\bigodot}$ (or $\stackrel{\textstyle c}{\diamondsuit}$) to select the second currency setting.
•	Press $\stackrel{\text{\tiny Homeony}}{\bigodot}$ or $\underset{\text{\tiny End}}{\bigodot}$ to select "Y", and then press $\overset{\text{\tiny Memony}}{\bigodot}$ (or \bigodot >*>).
•	Press $\stackrel{\text{\tiny Hemory}}{\bigodot}$ or $\stackrel{\triangle}{\bigodot}$ to select the separator, and then press $\stackrel{\text{\tiny Memory}}{\bigcirc}$ (or $\stackrel{\triangle}{\diamondsuit}$).
16	With "EXIT SETUP" displayed, press
To convert currencies:	
0	Press Setup .
2	Type in the value that you wish to convert.
	To change the direction for calculating the currencies, press ${}^{*}\!$
8	Press