brother®

TZ TAPE

P-touck

PT-18R

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.



www.P-touch.com



- 1 INTRODUCTION
- 2 GETTING STARTED
- (3) EDITING A LABEL
- 4 LABEL PRINTING
- 5 USING THE MEMORY
- (6) MAINTAINING YOUR P-TOUCH
- 7 TROUBLESHOOTING
- 8 APPENDIX
- 9 INDEX

Declaration of Conformity

We BROTHER INDUSTRIES, LTD.

15-1, Naeshiro, Mizuho-ku, Nagoya 487-8561, Japan

declare that the Labelling System PT-18R conforms with the following normative documents:

EMC: EN 55022:1998 Class B

EN 55024:1998

EN 61000-3-2:1995

EN 61000-3-3:1995

and follows the provisions of the Electromagnetic Compatibility Directive 89/336/EEC (as amended by 91/236/EEC and 91/31/EEC). The AC adapter also conforms with EN 60950 and follows the provisions of the Low Voltage Directive 73/23/EEC. Issued by:BROTHER INDUSTRIES, LTD.

P & H Company Development DIV.

- IBM is a trademark of International Business Machines, Inc.
- Microsoft and Windows are registered trademarks of Microsoft Corporation, USA.
- The names of other software or products used in this document are trademarks or registered trademarks of the respective companies that developed them.

INTRODUCTION

Thank you for purchasing the P-touch PT-18R.

Your new P-touch is an easy to operate, feature packed labelling system that makes creating professional, high quality labels a breeze. In addition to easy label creation via pre-formatted label layouts, the P-touch editing software features advanced label formatting, block formats, bar codes and auto-numbering functions.

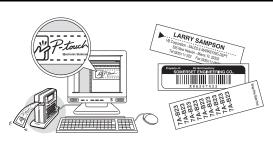
 Carry your compact, rechargeable P-touch with you anywhere without worrying about power supply.



 The battery charger also serves as a convenient storage stand, so the P-touch is always at hand and ready for use.



 You can quickly increase your labeling power, and design and print complex labels from your computer using the software provided.





Refer to the Software Installation Guide for more details and installation directions.













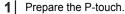




Creating Your First Label

This section introduces you to the methods used to create simple labels with your P-touch. By creating a simple label, you will become familiar with the procedure for creating general label layouts.

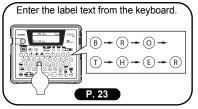
■ Creating a label with the P-touch





To create a label if the battery is not charged, connect the AC adapter directly to the P-touch machine. Refer to "AC Adapter" on page 19.

2 Enter the label text.



In addition to entering text, the P-touch has a large range of editing functions.

"Create labels like these"



3 Print the label.



You can check the layout of your label before printing.

Checking the label preview before printing prevents wasting tape on incomplete labels.

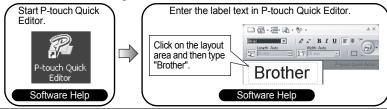


■ Creating a label with your personal computer

- 1 Prepare the P-touch. (Refer to step 1 in the previous section.)
- 2 Prepare the personal computer.

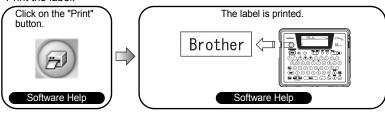


3 Enter the label text using P-touch Quick Editor.



4 Print the label.

August Sales Report



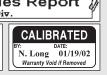
P-touch Quick Editor (simple label editing software) is ideal for creating simple labels.

To create labels with more complex designs, use P-touch Editor (fully featured label editing software)

LBI CORP.

Mike Barklev





1

4

5

6

7

Safety Precautions

Please read the following directions for safe use and handling before using your P-touch. These safety precautions are provided for your benefit to prevent unnecessary injury to you and those around you, and to prevent damage to the product. Please read and follow them carefully.

The following symbols indicate the level of danger associated with not using the product within the specified guidelines.

. MARNING	This symbol denotes that improper handling poses a risk of causing death or serious injury.
 ∴ CAUTION	This symbol denotes that improper handling poses a risk of causing injury or damage to the product.

The following symbols indicate specific directions.

: This symbol denotes that the action poses a risk of danger.

: This symbol denotes that the action is prohibited.

This symbol denotes that the action is required.

⚠ WARNING

Rechargeable battery

Failure to observe the following may result in fluid leaking, overheating, rupture, or fire, causing burns or other injuries.



- Do not throw the battery into a fire, or heat, solder or weld, disassemble or modify the battery.
- Do not allow metallic articles to short-circuit the terminals of the battery.
- Do not carry or store the battery together with metallic articles.
- Do not remove or damage the plastic cover on the battery, or use a battery with the plastic cover removed or damaged.
- Use only the battery charger designed exclusively for the rechargeable battery provided. Do not use any other battery charger.
- Do not charge the battery in high temperature locations.
- Do not use the battery with the positive (+) and negative (-) terminals connected incorrectly.
- If the battery leaks or emits an odour, it must be moved away from fire immediately.
- Do not let the battery get wet.



If the battery leaks, be careful not to let battery fluid contact your eyes.
 Battery fluid contacting your eyes may result in the loss of eyesight. If battery fluid comes into contact with your eyes, flush your eyes with clean water and seek medical attention immediately.

. WARNING



 If the battery begins to emit an odour, overheat, discolour, deform, or any other change occurs during use, charging, or storage, remove the battery immediately and discontinue use.

Battery charger

Failure to observe the following may result in fire, overheating, or failure.



- Do not allow metallic articles to short-circuit the terminals of the charger.
- Do not let the charger get wet. If water or other liquids get in the charger, unplug the AC adapter immediately.
- Do not use the charger while the charger terminals are wet or have condensation on them.
- Do not use this charger with any product other than the P-touch.
- · Use only the AC adapter provided with the P-touch.
- If the charger begins to emit an odour, overheat, discolour, deform, or any other change occurs during use, charging, or storage, remove the P-touch from the charger immediately, disconnect the AC adapter, and discontinue use.

AC adapter

Failure to observe the following may result in fire, electric shock, or failure.



- Always use the specified voltage (230V) and the AC adapter (Model-H1) provided.
- · Do not overload the power outlet.
- Do not place heavy objects on, damage or modify the power cord or plug. Do not forcibly bend or pull the power cord.
- · Do not use a damaged power cord.
- Do not touch the AC adapter or power plug with wet hands.
- Make sure that the plug is fully inserted to the power outlet. Do not use an outlet that is loose.

P-touch

Failure to observe the following may result in fire, electric shock, or failure.



- · Do not disassemble or modify the P-touch.
- Do not drop, hit or otherwise damage the P-touch.
- Do not spill drinks or other liquids on the P-touch, or otherwise let the P-touch become wet.
- Do not use the P-touch if any foreign object has entered the P-touch.
 If any foreign object has entered the P-touch, immediately turn the power off, disconnect the AC adapter, remove the battery, and discontinue use.
- If the P-touch begins to emit an odour, overheat, discolour, deform, or any other change occurs during use, charging, or storage, remove the P-touch from the charger immediately, disconnect the AC adapter, remove the battery, and discontinue use.



 Do not let children play with the empty package that the P-touch came in when purchased. Store the empty package in location out of the reach of children, or dispose of it. Empty packaging can be a choking or suffocation hazard for children.

















! CAUTION

Rechargeable battery

Failure to observe the following may result in fluid leaking, overheating, rupture, or deteriorated performance and life span.



- · Do not hit or throw the battery.
- Do not use or leave battery exposed in direct sunlight, near heaters or other hot appliances, or in any location exposed to extremely high temperatures.
- Remove the battery when not using the P-touch for any extended period of time.



· If battery fluid comes into contact with skin or clothes, wash the affected areas thoroughly with clean water. Battery fluid is harmful to skin.

Battery charger

Failure to observe the following may result in fire, electric shock, or short circuit.



- Do not use or place the battery charger in direct sunlight, near heaters or other hot appliances, in any location exposed to extremely high temperatures, high humidity, or dusty locations.
- · Do not disassemble or modify the battery charger.
- · Do not hit or throw the battery charger.
- · Do not carry or store the battery charger together with metallic articles.

AC adapter



- Be sure to disconnect the AC adapter and battery charger from the power outlet and the P-touch when not using the P-touch for any extended period of time.
- Always hold the plug when disconnecting the power cord from the power outlet.

Tape cutter



· Do not touch the tape cutter with your hands. This may result in injury.

Usage/storage location



- Do not place the P-touch or battery charger in unsafe locations such as unstable platforms or high shelves, etc. It may fall down and cause an injury.
- Do not place heavy objects on the P-touch or battery charger. It may fall down and cause an injury.

Memory



Any data stored in memory will be lost due to failure or repair of the P-touch, or if the battery expires.

Tape



· Depending on the environmental conditions and the material and condition of the affixing surface, the label may peel off or the colour of the tape may change. When removing labels, adhesive may remain, the tape's colour may be transferred to the surface, or the surface beneath the label may otherwise be damaged. Be sure to test the label on the intended surface and material before affixing the label.

General Precautions

- Do not use the P-touch in any way or for any purpose not described in this guide. Doing so may result in accidents or damage the machine.
- Use only genuine TZ tapes, with the TZ mark, in the P-touch.
- · Do not pull or press on the tape in the cassette.
- Do not put any foreign objects into the tape exit slot, AC adapter connector, or USB port, etc.
- Do not try to print labels using an empty tape cassette or without a tape cassette set in the P-touch. Doing so will damage the print head.
- · Do not touch the print head with your fingers.
- Note that all data stored in memory will be lost if you disconnect BOTH the AC adapter AND the rechargeable battery.
- Do not use paint thinner, benzene, alcohol or any other organic solvent to clean the Ptouch.
- Do not place the P-touch in direct sunlight, near heaters or other hot appliances, in any location exposed to extremely high or low temperatures, high humidity, or dusty locations. Standard operating temperature range: 10°C to 35°C.
- Be careful not to scratch the CD-ROM. Do not place the CD-ROM in any location exposed to high or low temperatures. Do not place heavy objects on the CD-ROM or bend it.
- The software on the CD-ROM is intended for use with the P-touch and may be installed on more than one PC.
- We strongly recommend that you read this User's Guide carefully before using your Ptouch, and then keep it nearby for future reference.

Symbols Used in this Guide

The following symbols are used throughout this guide to indicate additional information.

. This symbol indicates information or directions that may result in damage or injury if ignored, or operations that will result in errors.

This symbol indicates information or directions that may help you understand and use the P-touch more efficiently.













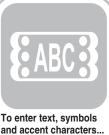






This section provides quick and easy access to information on tasks often needed by users. Simply look for your task below and then go to the page indicated.

If the task you are looking for is not shown here, try the Contents or Index pages.



Entering text/symbols/accent characters





To format the label...

Text/Label format functions





To change the cutting and margin settings

Tape cutting options





To create and print bar code labels...

Bar code function





To print multiple copies (with autonumbering)...

Multiple copy/autonumbering functions

P. 46



To save a label layout...

Memory function



Contents

INTRODUCTION	1
Creating Your First Label Safety Precautions General Precautions. Symbols Used in this Guide Quick Index Contents	4 7 7
GETTING STARTED	11
Unpacking Your P-touch General Description. LCD Display & Keyboard. LCD Display Key Names and Functions. Power Supply. Rechargeable Battery. AC Adapter. Inserting a Tape Cassette. Turning Power On/Off Feeding Tape. LCD Contrast.	12 13 14 16 16 19 19 21 22
EDITING A LABEL	23
Entering and Editing Text Entering Text from the Keyboard Adding a New Line Moving the Cursor Inserting Text Deleting Text Entering Symbols Entering Symbols Using Key Entering Symbols Using the Symbol Function Entering Accented Characters Entering Accented Characters Using Key Entering Accented Characters Using Composite Character Keys Entering Accented Characters Using the Accent Function Setting Character Attributes Setting Label Attributes Creating a Bar Code Label	23 23 23 24 24 24 25 26 26 27 28 30
Setting Bar Code Parameters	



















INTRODUCTION

Entering Bar Code Data	33
Editing and Deleting a Bar Code	
Using Auto-Format Layouts	
Using Templates - Example creating an asset tag	
Using Block Layouts	
Automatic Currency Conversion Currency Conversion Setup	
Converting Currency	
LABEL PRINTING	
Label Preview.	45
Printing a Label	
Printing a Single Copy	45
Printing Multiple Copies	
Auto-numbering Labels	
Mirror Printing	
Tape Cutting Options	
Attaching Labels	51
USING THE FILE MEMORY	. 52
Storing a Label into Memory	52
Opening a Stored Label File	
Deleting a Stored Label File	54
MAINTAINING YOUR P-touch	. 55
Resetting the P-touch	55
Maintenance	
Cleaning the Main Unit	
Cleaning the Print Head	
Cleaning the Tape Cutter	
Cleaning the Charging Terminals	56
TROUBLESHOOTING	. 57
What to do when	
Error Messages	bU
APPENDIX	. 63
Specifications	
Accessories	66
INDEX	. 71

GETTING STARTED

Unpacking Your P-touch

Check that the package contains the following before using your P-touch.

P-touch PT-18R



TZ tape cassette



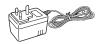
CD-ROM



USB cable



AC adapter



Rechargeable battery



Battery charger



User's Guide

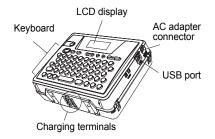


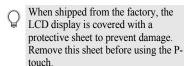
Software Installation Guide

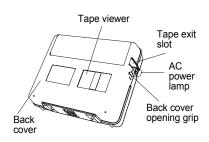


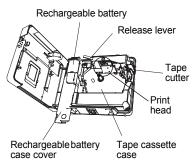
8

General Description

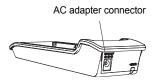








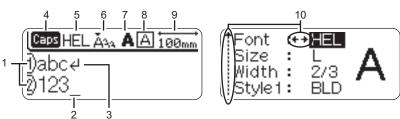
Battery charger





LCD Display & Keyboard

LCD Display



1. Line number

Displayed at the beginning of each line, this mark indicates the line number within the label layout.

2. Cursor

Indicates the current position of the cursor. New characters are entered to the left of the cursor, and the character to the left of the cursor is deleted when the 3 key is pressed.

3. Return mark

Indicates the end of a line of text.

4. Caps mode

Indicates that the Caps mode is on.

5.~8. Style guidance

Indicates the current font (5), character size (6), character style (7) and frame (8) settings.

9. Tape length

Indicates the tape length for the text entered.

10.Cursor selection

Indicates that you can use the cursor keys to select the items on the screen. Use the $\textcircled{\uparrow}$ and $\textcircled{\downarrow}$ keys to select a menu item, and the $\textcircled{\leftarrow}$ and $\textcircled{\rightarrow}$ keys to change the setting.









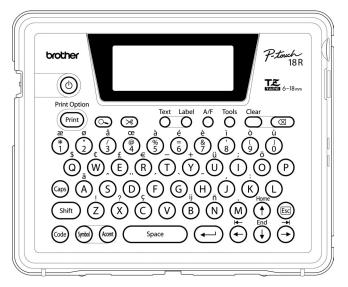








Key Names and Functions



(Power):

· Turns the P-touch on and off.

(Print):

- Prints the current label design onto the tape.
- Opens the Print Options menu when used in combination with the key.

(Preview):

Displays a preview of the label.

 Feeds 22.5 mm of blank tape and then automatically cuts the tape.



 Opens the Text menu, where you can set character attributes for the label.

| Comparison of the label of

 Opens the Label menu, where you can set label attributes for the label.

 Opens the Auto-Format menu, where you can create labels using pre-defined templates or block formats.



 Opens the Tools menu, where you can set operating preferences for the Ptouch.

Glear :

 Clears all text entered, or all text and current label settings.

(Backspace):

- Deletes the character to the left of the cursor.
- Cancels the current command and returns the display to the data entry screen or the previous step.

Caps):

 Turns the Caps mode on and off. When the Caps mode is on, uppercase letters can be entered by simply pressing a character key. (*) ~ (M):

- Use these keys to type letters or numbers.
- Uppercase letters, symbols or accent characters can be entered using these keys in combination with the , smr, or keys.

Shift :

 Use this key in combination with the letter and number keys to type uppercase letters or the symbols indicated on the number keys.



 Use this key in combination with keys that have blue characters above them to type the accented characters or symbols indicated, or to activate the function indicated.



Use this to select and enter a symbol from a list of available symbols.



 Use this to select and enter an accented character from the list of available characters.



- Enters a blank space.
- Returns a setting to the default value.

(Return):

- Enters a new line when entering text.
- Selects the option displayed when setting label attributes in the function menus, or when entering symbols or accent characters.

 Cancels the current command and returns the display to the data entry screen or the previous step.

⊕ ⊕ ⊕ ⊕:

Moves the cursor in the direction of the arrow when entering or editing characters, entering symbols or accented characters, and when setting label attributes in the function menus.

















Power Supply

Your P-touch has a rechargeable battery that allows you to use it anywhere when charged, and an AC adapter that allows you to use it while connected to an electrical outlet when the battery's charge becomes low.

Rechargeable Battery

The battery can be recharged by placing the P-touch on the battery charger stand.

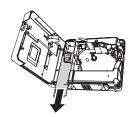
Connect the AC adapter directly to the P-touch to use it immediately after purchase or when the battery's charge becomes low.

■ Installing the rechargeable battery

- Disconnect power to the P-touch when installing or removing the rechargeable battery.
 - Use only the battery charger designed exclusively for the rechargeable battery provided with your P-touch.
 - Do not remove or damage the plastic cover on the rechargeable battery, or use a battery with the plastic cover removed or damaged.
- Press on the back cover opening grip and open the back cover.



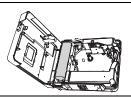
2 Slide the battery case cover in the direction of the arrow and open the case.



Connect the battery as shown in the figure. Make sure that the wires to the connector match the black and red stickers on the case.



4 Insert the battery into the battery case and push the wires into the compartment so that they do not get damaged by the battery case cover.



5 Attach the battery case cover and close the back cover.

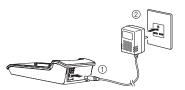




① Make sure that the release lever is up when closing the back cover. The back cover cannot be closed if the release lever is pressed down.

■ Charging the battery

1 Insert the plug on the AC adapter cord into the connector on the battery charger and insert the AC adapter plug into a standard electrical outlet.



Place the P-touch on the battery charger. When it is sitting on the battery charger correctly, the AC power lamp on the P-touch lights.

Charging time approx. 12 hours

The P-touch can be placed in the battery charger in either direction.



















GETTING STARTED



- The AC power lamp lights when the P-touch is set in the battery charger and the AC adapter is connected to the battery charger, or when the AC adapter is connected directly to the Ptouch, regardless of whether a battery is fitted or charging is complete.
- Be sure to charge the battery before using the P-touch.
- Connect the AC adapter directly to the P-touch to use it when the battery's charge becomes low.
- Return the P-touch to the battery charger after use. Even when not used the battery will run
 down if the P-touch is not placed on the battery charger.
- Leaving the P-touch on the charger even when the battery is fully charged will not damage it.
- The battery may not be charged sufficiently when the power supply is less than the rated voltage.

■ Replacing the rechargeable battery

Replace the battery when the P-touch can only be used for a short time even after recharging. The battery may not be charged sufficiently when the power supply is less than the rated voltage. While the replacement period varies depending on the conditions of use, the battery will generally need to be replaced after approximately one year. Be sure to replace it with the specified rechargeable battery (BA-18R).



Be sure to charge the new battery for 12 hours after replacement.

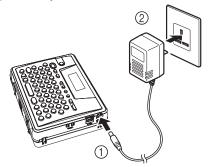
- 1 Press on the back cover opening grip and open the back cover.
- 2 Slide the battery case cover in the direction of the arrow and open the case.
- Remove the expired battery and disconnect the connector.



- 4 Connect the connector on the battery wires and insert the new battery into the case. Refer to "Installing the rechargeable battery" on page 16.
- **5** Attach the battery case cover and close the back cover.
- Be sure to dispose of the expired battery as directed by local regulations for the disposal of nickel metal hydride batteries.
 - Do not remove or damage the plastic cover on the expired battery, or attempt to disassemble the expired battery.

AC Adapter

Connect the AC adapter directly to the P-touch.

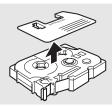


- Insert the plug on the AC adapter cord into the connector marked DC IN 9.5V on the P-touch.
- Insert the AC adapter plug into a standard electrical outlet.
- - Turn the P-touch off before disconnecting the AC adapter.
 - Disconnect the AC adapter from the P-touch and electrical outlet when you do not intend to use the P-touch for an extended period.
 - Do not pull or bend the AC adapter cord.
 - Use only the AC adapter (Model-H1) designed exclusively for your P-touch. Failure to observe this may result in an accident or damage. Brother shall not assume any responsibility for any accident or damage resulting from not using the specified AC adapter.
 - Do not connect the AC adapter to a non-standard electrical outlet. Failure to observe this may result in an accident or damage. Brother shall not assume any responsibility for any accident or damage resulting from not using a standard electrical outlet.

Inserting a Tape Cassette

Tape cassettes of 6 mm, 9 mm, 12 mm or 18 mm width can be used in your P-touch. Use only tape cassettes with the **T** mark.

If the new tape cassette has a cardboard stopper, be sure to remove the stopper before inserting the cassette.













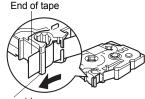








Check that the end of the tape is not bent and that it passes through the tape guide.



Tape guide

After making sure that the power is off, press on the back cover opening grip and open the back cover. If there is already a tape cassette in the P-touch, remove it by pulling it straight up.



- Insert the tape cassette into the tape compartment, with the end of the tape facing the P-touch's tape exit slot, and press firmly until you hear a click.
 - When inserting the tape cassette, make sure that the tape and ink ribbon do not catch on the print head.

Tape exit slot

4 Close the back cover.



- Make sure that the release lever is up when closing the back cover. The back cover cannot be closed if the release lever is pressed down.
 - Be sure to feed tape to remove any slack in the tape and ink ribbon after inserting the tape cassette. Refer to "Feeding Tape" on page 22.
 - Do not pull the label coming out of the tape exit slot. Doing so will cause the ink ribbon to be discharged with the tape.
 - Store tape cassettes in a cool dark location, away from direct sunlight and high temperature, high humidity, or dusty locations. Use the tape cassette as quickly as possible after opening the sealed package.

Turning Power On/Off

Press the (b) key to turn the P-touch on.

Press the (6) key again to turn the P-touch off.

	HEL Å44	mm
1)		

- Your P-touch has a power saving function that automatically turns itself off if no key is pressed within a certain time under certain operating conditions. Refer to the Auto Power-Off Time table below for details.
- If the battery is still charged or the P-touch is connected to an electrical outlet by the AC adapter, the previous session's information is displayed when the power is turned on.

Auto Power-Off Time

	P-touch only	Connected to PC
With AC adapter	1 hour	1 hour
With battery	5 minutes	5 minutes with no operation. 1 hour after printing from PC.















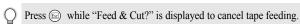


Feeding Tape

The Feed & Cut function feeds 22.5 mm of blank tape then cuts the tape.

- Be sure to feed tape to remove any slack in the tape and ink ribbon after inserting the tape cassette.
 - Do not pull the label coming out of the tape exit slot. Doing so will cause the ink ribbon to be discharged with the tape.
 - Do not block the tape exit slot during printing or when feeding tape. Doing so will cause the tape to jam..
- Press the ⊛ key.
 "Feed & Cut?" appears on the display.
- 2 Press the ← key to feed tape.

 The message "Feeding Tape... Please Wait" appears while the tape is fed, and then the tape is cut.



LCD Contrast

You can change the contrast setting of the LCD display to one of five levels (+2, +1, 0, -1, -2) to make the screen easier to read. The default setting is "0".

Press the ™ key to display the Tools menu, select "LCD Contrast" using the ↑ or ♠ key, and then press the ← key.



Select a contrast level using the (†) or (*) key.
The screen contrast changes each time you press the
(†) or (*) key, allowing you to set the most suitable contrast.



3 Press the ← key.



- Press the key to return to the previous step.
 - Pressing the _____ key on the contrast setting screen sets the contrast to the default value "0".

EDITING A LABEL

Entering and Editing Text

Using the keyboard of your P-touch is very similar to using a typewriter or word processor.

Entering Text from the Keyboard

- To enter a lowercase letter or a number, simply press the desired key.
- To enter a blank space in the text, press the Space key.
- To enter an uppercase letter or one of the symbols on the number keys, hold down the (shift) key and then press the desired key.
- To enter uppercase letters continuously, press the
 key to enter Caps mode, and then press the desired keys.



- To exit Caps mode, press the (aps) key again.
- To enter a lowercase letter while in Caps mode, hold down the (shift) key and then press the desired key.

Adding a New Line

- To end the current line of text and start a new line, press the

 key. A return mark appears at the end of the line and the cursor moves to the start of the new line.
- There is a maximum number of lines of text that can be entered for each tape width. A maximum of 5 lines can be entered for 18 mm tape. 3 lines for 12 mm tape, and 2 lines for 9 mm and 6 mm tape.
 - If you press the (key when five lines already exist, an error message is displayed.

Moving the Cursor

- To move the cursor left, right, up or down, press the ← → , ↑ or ↓ keys. Each press of the key moves the cursor one space or line.
- and then press the \leftarrow or \rightarrow keys.
- To move the cursor to the very beginning or end of the text, hold down the
 key and then press the (\uparrow) or (\downarrow) kevs.

Inserting Text

 To insert additional text into an existing line of text, move the cursor to the character to the right of the position where you want to start inserting text and then enter the additional text. The new text is inserted to the left of the cursor.

















Deleting Text

■ Deleting one character at a time

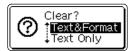
To delete a character from an existing line of text, move the cursor to the character
to the right of the position you want to start deleting text and then press the <a> key.
 The character to the left of the cursor is deleted each time the <a> key is pressed.



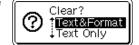
If you hold down the (32) key, the characters left to the cursor are deleted continuously.

■ Deleting all text at once

- Use the key to delete all text at once.
- Press the \(\text{key}. \)
 The Clear options are displayed.



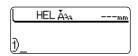
2 Using the ⊕ or ⊕ keys, select "Text Only" to delete all text while retaining the current format settings, or select "Text & Format" to delete all text and format settings.



Press the key to return to the text entry screen.

Press the key.

All text is deleted. All format settings are also deleted if Text & Format was selected.



Entering Symbols

Including the symbols available on the keyboard, there are a total of 103 symbols (including international and extended ASCII characters) available with the Symbol function.

There are two methods of entering symbols:

- Using the
 key.
- Using the Symbol function.

Entering Symbols Using Key

Symbols printed in blue above the keys on the keyboard can be entered using the \circledcirc key.

• To enter one of these symbols, hold down the key and then press the desired key.

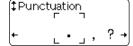
Entering Symbols Using the Symbol Function

The Symbol function offers a total of 103 symbols.

1 Press the seekey.

A list of symbols is displayed.

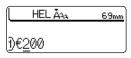
The last symbol entered is selected in the list displayed.



Select a group using the ⊕ or ⊕ keys, and then select a symbol using the ⊕ or ⊕ keys.



Press the key.
The selected symbol is inserted into the line of text.



Q

- Press the 🔊 key to return to the previous step.
- Refer to the Symbol List table for a complete list of all groups and symbols available.

Symbol List

Group									5	Syn	nbo	ols								
(A) Punctuation		,	?	!	"	'	:	;	-	_	\	/	&	Ċ	i	7	§	•		
(B) Business	@	#	%	B	©	тм	Œ													
(C) Mathematics	+	-	×	÷	±	=	*													
(D) Bracket	()	[]	<	>														
(E) Arrow	→	+	t	ţ																
(F) Unit	\$	¢	€	£	Fr	f	¥	0												
(G) International	a	ō	ß	SS	α	β	γ	δ	μ	Ω	Đ	ð	Þ	þ	ij					
(H) Number	1/2	1/3	1/4	2	3	2	3													
(I) Pictograph	*	•		Δ	♦															
(J) Electrical	Ţ	\downarrow	./.	~		⊣⊢		ψ	0	I	Θ	(1)	\bigcirc	-⊘-	4		Ø	μ	Ω	
(K) Others	8	Δ	A	æ	ā	7	otag	♂	우											

The use of the CE mark is strictly governed by one or more European Council directives. Ensure that any labels you produce which use this mark conform with the relevant directives.

















Entering Accented Characters

The P-touch can display and print a set of accented characters such as composite characters that consist of a letter and a diacritical mark (eg. Ä) and other language specific characters.

There are three methods of entering accented characters:

- Using the
 key.
- Using the composite character keys.
- · Using the Accent function.

Entering Accented Characters Using Key

Accented characters printed in blue above the keys on the keyboard can be entered using the $\ensuremath{\ @}\$ key.

To enter one of these accented characters, hold down the key and then press the
desired key.

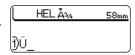
Entering Accented Characters Using Composite Character Keys

Composite characters consist of a letter and a diacritical mark. The diacritical marks available are $^{\land}$, $^{\cdot}$, $^{\cdot}$, and $^{\sim}$.

Hold down the key key and then press the key for the desired diacritical mark.

The diacritical mark is displayed.

Type in the desired letter.
The composite character is entered in the line of text.



Refer to the Composite Character List table for a complete list of diacritical marks and composite characters available.

■ Composite Character List

Diacritical Mark	Composite Characters
٨	â ê î ô û Â Ê Î Ô Û
	äëïöüÿÄËïÖÜ
,	á é í ó ú ć ń ŕ ś ý ź Á É Í Ó Ú Ć Ń Ŕ Ś Ý Ź
`	àèìòùÀÈìÒÙ
~	ã ẽ õ ñ Ã Ë Õ Ñ

Entering Accented Characters Using the Accent Function

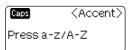
The Accent function offers a total of 119 accented characters.

Press the key.

The accent group screen is displayed.

Q

Caps mode can be used with the Accent function.



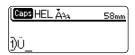
Type the letter for the desired composite character, or press the ← key and select it using the ♠ or ♠ keys.



Keep typing the same letter until the desired composite character is selected, or select it using the
→ or → keys.



4 Press the ← key.
The selected composite character is inserted into the line of text.





- \bullet Press the $\ensuremath{\mbox{\fontfamily length}}$ key to return to the previous step.
- Refer to the Accented Character List table for a complete list of all accented characters available.

■Accented Character List

Character	Accented Characters	Character	Accented Characters
а	à á â ã ä å æ ă ą	N	ÑŃŇ
Α	À Á Â Ã Ä Å Æ ĂĄ	0	òóôõöøœôő
С	çćč	0	ÒÓÔÕÖØŒÔŐ
С	ÇĆČ	r	ŕř
d	ď đ	R	ŔŘ
D	ďď	S	ŚŠŞ
е	èéêëĕęẽ	S	ŚŠŞ
E	ÈÉÊËĚĘĒ	t	ť ť
g	ğ	Т	T' Ť
G	Ğ	u	ùúûüůű
i	ìíîïı	U	ὺύῦϋὑΰ
I	ìíîïi	У	ÿý
	ľĬł	Y	Ý
L	ĽĽŁ	Z	źżž
n	ñńň	Z	ŹŻŽ

















Setting Character Attributes

Using the * key, you can select a font and apply size, width and style attributes.

1 Press the 🦉 key.
The current settings are displayed.

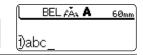
Font :++

Select an attribute using the + or + keys, and then set a value for that attribute using the + or - keys.

\$Style2:++**IT A**

3 Press the key to apply the settings.

New settings are NOT applied if you do not press the (\leftarrow) key.





- Press the key to return to the previous step.
- Press the space key to set the selected attribute to the default value.
- Refer to the Setting Options table for a list of all available settings.
- Small characters may be difficult to read when certain styles are applied (eg. Shadow + Italic).
- When selecting "S", "M" and "L" in the text size attributes, the actual size when printed will differ depending on the tape cassette width installed, and the number of lines on the label.

Setting Options

Attribute	Value	Result
	HEL (Helsinki)	ABCabc
Font	BRU (Brussels)	ABCabc
Tone	FLO (Florida)	ABCabc
	BEL (Belgium)	ABCabc

Attribute	Value	Result						
	L	ABCabc						
Size	М	ABCabc						
	S	ABCabc						
	2	ABCabc						
Width	1	ABCabc						
	2/3	ABCabc						
	1/2	ABCabc						
044-4	OFF	ABCabc						
	BLD (Bold)	ABCabc						
Style1	OUT (Outline)	ABCabc						
	SHD (Shadow)	ABCabc						
Style2	OFF	ABCabc						
	ITL (Italic)	ABCabc						
	VRT (Vertical)	A B O a o o						

By combining the "Style1" and "Style2" settings you can create Italic Bold, Italic Outline, Italic Shadow, Vertical Bold, Vertical Outline and Vertical Shadow styles.

















Setting Label Attributes

Using the delta key, you can create a label with a frame around the text and specify the label length. The text can be aligned within the label in one of three ways.

Press the key.
The current settings are displayed.

†Frame :++ OFF Align : L
Align : L ↓Length: Auto

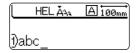
2 Select an attribute using the ① or ① keys, and then set a value for that attribute using the ② or ③ keys. When "Length" is set to "Fixed" press the ① key again and set the label length using the ④ or ④ keys or the number keys.



When setting the label length, hold down the \bigcirc or \bigcirc keys to change the value in increments of 10.

3 Press the key to apply the settings.





1	1
V	1
	= €

- ullet Press the ullet key to return to the previous step.
- Press the Space key to set the selected attribute to the default value.
- Refer to the Setting Options table for a list of all available settings.

Setting Options

Attribute	Value	Result	
	OFF	ABCabc	
	1	ABCabc	
Frame	2	ABCabc	
	3	ABCabc	
	4	ABCabc	

Attribute	Value	Result		
	5	ABCabc 1234567		
	6	ABCabc 1234567		
	7	<u>ABCabc</u>		
	8	ABCabc		
Frame	9	<pre>& ABCabc 3</pre>		
ramo	10	ABCabc		
	11	ABCabc		
	12			
	13	ABCabc		
	14	ABCabc		
	L (Left)	ABCabc		
Align	C (Centre)	ABCabc		
	R (Right)	ABCabc		
Length	Auto	The length of the label is automatically adjusted based on the amount of text entered.		
	Fixed	The length of the label can be set within the range 40 - 300 mm.		



















Creating a Bar Code Label

Using the Bar Code function you can create labels with bar codes for use with cash registers, stock control systems or other bar code reader systems, or even asset control tags used in an asset management system.



- The P-touch is not designed exclusively for creating bar code labels. Always check that bar code labels can be read by the bar code reader.
- For best results, print bar code labels in black ink on white tape. Some bar code readers may
 not be able to read bar code labels created using coloured tape or ink.
- Use the "Large" setting for "Width" whenever possible. Some bar code readers may not be able to read bar code labels created using the "Small" setting.
- Continuously printing a large number of labels with bar codes can overheat the print head, which may effect printing quality.

Setting Bar Code Parameters

Press the test key to display the Tools menu, select "Bar Code Setup" using the (↑) or (√) keys, and then press the (←) key.

The Bar Code Setup screen is displayed.

Select an attribute using the (†) or (‡) keys, and then set a value for that attribute using the (+) or (+) keys.

0

The "C-Digit" attribute is only available for the CODE39, I-2/5 and CODABAR protocols.

(Bar	Code Setup>
‡C. Digit	:++OFF

3 Press the \leftarrow key to apply the settings.

New settings are NOT applied if you do not press the ← key.



- ullet Press the lacktriangle key to return to the previous step.
- Press the Space key to set the selected attribute to the default value.
- Refer to the Bar Code Settings table for a list of all available settings.

Bar Code Settings

Attribute	Value
Protocol	CODE39, CODE128, EAN8, EAN13, EAN128, UPC-A, UPC-E, I-2/5 (ITF), CODABAR
Width	Large
	Small

Attribute	Value	
Under#	ON	
(characters printed below bar code)	OFF	
	OFF	
C.Digit (check digit)	ON (only available for the CODE39, I-2/5 and CODABAR protocols)	

Entering Bar Code Data

Press the **S* key to display the Tools menu, select "Bar Code Input" using the ** or ** keys, and then press the ** key.

The Bar Code Input screen is displayed.

〈Bar Code Input〉 CODE39 ▶**◀



Only one bar code can be entered in a label.

Type in the bar code data.

Special characters can be entered in the bar code when using the CODE39, CODABAR, CODE128 or EAN128 protocols. When not using special characters, go to step 5.



Press the key.
A list of characters available for the current protocol is displayed.



Select a character using the (†) or (‡) keys, then press the (—) key to insert the character in the bar code data.



Press the key to insert the bar code in the label. Two bar code marks are displayed in the text.



 \circ

• Press the (Esc) key to return to the previous step.

• Refer to the Special Characters List table for a list of all available settings.



















Special Character List

CODE39

CODABAR

Code	Special Character	Code	Special Character
0	-	0	-
1	•	1	\$
2	(SPACE)	2	:
3	\$	3	/
4	/	4	•
5	+	5	+
6	%		

CODE128, EAN128

DC3 DC4 NAK SYN ETB CAN
DC4 NAK SYN ETB
NAK SYN ETB
SYN ETB
ETB
CAN
CAN
EM
SUB
ESC
{
FS
GS
}
RS
~
US
DEL
FNC3
FNC2
FNC4
FNC1

Editing and Deleting a Bar Code

- To edit the bar code data in a bar code already placed in a label, position the cursor beneath either of the bar code marks on the data entry screen and then open the Bar Code Input screen. Refer to "Entering Bar Code Data" on page 33.
- To edit the "Width" and "Under#" settings for a bar code already placed in a label, position
 the cursor beneath either of the bar code marks on the data entry screen and then open
 the Bar Code Setup screen. Refer to "Setting Bar Code Parameters" on page 32.
- To delete a bar code from a label, position the cursor to right of the bar code marks on the data entry screen and press the <a> key.

Using Auto-Format Layouts

Using the Auto-Format function you can quickly and easily create labels for a variety of purposes, such as file tabs, equipment labels, name badges, etc. Simply select a layout from one of the ten templates or sixteen block layouts, enter the text and apply formatting as desired.



- Symbols and accented characters can also be used in auto-format layouts.
- Bar codes can be used in the Asset Tag and Bin Box templates.

Using Templates - Example creating an Asset Tag

Press the

key to display the Auto-Format screen, and then select "Templates" using the

n or

keys.



Press the key.
The last template used is displayed.



3 Select a template using the (†) or (‡) keys.



Press the key.
The Style screen is displayed.



5 Select an attribute using the ⊕ or ⊕ keys, and then set a value for that attribute using the ⊕ or ⊕ keys.



















6	Press the key. The Bar Code Setup screen is displayed.	<pre></pre>
7	Select an attribute using the (†) or (↓) keys, and then set a value for that attribute using the (←) or (→) keys. The "C-Digit" attribute is only available for the CODE39, I-2/5 and CODABAR protocols.	<pre></pre>

Press the key.
The template text entry screen is displayed.



9 Enter the text and then press the ← key. Repeat this for each text field.

After all text fields are entered, the print menu is displayed when the (\leftarrow) key is pressed.

Caps mode can be used when entering text.



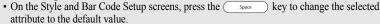
10 Select "Print" using the ♠ or ♠ keys and then press the ← key to print the label.

0

• Select "Edit" to change the text data or style settings.

• Select "Quit" to exit the Auto-Format function.

Press the key to return to the previous step.
 On the Style and Bar Code Setup screens, press



- Refer to the Templates table for a list of available templates.
- If the width of the current tape cassette does not match the set width for the selected layout, an error message is displayed when you try to print or preview the label. Press the key or any other key to clear the error message, and insert a tape cassette of the correct width.

■ Preview and print options for templates

- When the print menu is displayed, press the 🖎 key to preview the label layout.
- To print the label directly from the Preview screen, press the Print key.
- To print multiple copies, sequentially numbered copies, or a mirror image of the label, with the print menu displayed hold down the key and press the key to display the Print Options menu.

■Templates

Attribute	Value	Details
	Binder Spine	TAMOMAN-4N ZAHMA-4N
	Direct Opinio	(18 mm x 254 mm)
	File Tab	PAYABLES
		(12 mm x 89 mm)
	Hanging Folder	AUGUST
		(12 mm x 45 mm)
	Asset Tag	Property of: ABC Company, Inc.
		(18 mm x 70 mm)
	Bin Box	Lock Washer 1.4.—20 NF Thread Size 0 112502 05400 9
		(18 mm x 76 mm)
Template Name	Equipment Label	ABC Company, Inc. Control Sales Equipment No. 123456789 (18 mm x 58 mm)
	Faceplate (VRT)	(12 mm x 70 mm)
	Cable Wrap	(18 mm x 39 mm)
	Name Badge 1	Robert Becker ABC Transport
		(18 mm x 58 mm)
	Name Badge 2	Robert Becker ABC Transport
		(12 mm x 70 mm)





















Using Block Layouts

1 Press the ∜ key to display the Auto-Format screen, and then select "Block Layouts" using the (†) or (↓) keys.

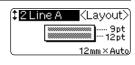


Press the ← key to display the Tape Width screen, and then select a tape width using the ♠ or ♠ keys.

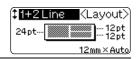


Press the key.

When the tape width has not changed, the last block layout selected is displayed. When the tape width has changed, the default layout for the new tape width is displayed.



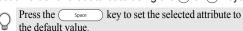
4 Select a block layout using the ♠ or ♠ keys.



Press the key.
The Style screen is displayed.

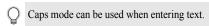


6 Select an attribute using the ⊕ or ⊕ keys, and then set a value for that attribute using the ⊕ or ⊕ keys.





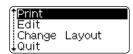
Press the key.
The block layout text entry screen is displayed.





Enter text and then press the
Repeat for each text field.

After all text fields are completed, press the
key to display the print menu.



9	Select Print using the (†) or (‡) keys and then press the — key to print the label.
	 Select "Edit" to change the text data or style settings. Select "Change Layout" to use a different layout. Select "Quit" to exit the Auto-Format function.
\sim	Press the key to return to the previous step

\circ	•	Press the (Esc) key to return to the previous step.
\bigcirc		Press the key to return to the previous step.

- Refer to the Block Layouts table for a list of available block layouts.
- The "Clear All Text?" message is displayed when the dear key is pressed while entering text. Press the key to delete all text, or press the key to not delete the text.
- If the width of the current tape cassette does not match the set width for the selected layout, an error message is displayed when you try to print or preview the label. Press the key or any other key to clear the error message, and insert a tape cassette of the correct width.
 - If the number of characters entered exceeds the limit, an error message is displayed when the key is pressed. Press the key or any other key to clear the error message, and edit the text using fewer characters.

■ Preview and print options in block layouts

- When the print menu is displayed, press the
 key to preview the label layout.
- To print the label directly from the Preview screen, press the (Print) key.
- To print multiple copies, sequentially numbered copies, or a mirror image of the label. with the print menu displayed hold down the (iv) key and press the (Print) key to display the Print Options menu.

















■Block Layouts

Attribute	Value	Details
	2 Line A	1st Line 2nd Line
	2 Line B	1st Line
	3 Line	1st Line 2nd Line 3rd Line
Block layout	1+2 Line A	Left Right 1st Right 2nd
(18 mm tape)	1+2 Line B	Left Right 2nd
	1+3 Line	Left Right 1st Right 2nd Right 3rd
	1+4 Line	Left Right 1st Right 2nd Right 3nd Right 3th
	1+5 Line	Left Right 1st Right 2nd Right 3nd Right 4th Right 5th R
	2 Line A	1st Line 2nd Line
Block layout	2 Line B	1st Line 2nd Line
(12 mm tape)	3 Line	tel Line 2rd Line 3rd Line
	1+2 Line	Left Right 1st Right 2nd

Attribute	Value	Details
	2 Line A	1st Line 2nd Line
Block layout (9 mm tape)	2 Line B	1st Line 2rd Lins
	1+2 Line	Left Right 1st
Block layout (6 mm tape)	1+2 Line	Left Right fat Replicated





Automatic Currency Conversion

Using the currency conversion function you can easily convert Euros to and from other currencies and add the two prices to the text of your label. Simply select the currency you want to work with and the layout of the result to easily create labels with prices in both Euros and another currency.

Currency Conversion Setup

Press the [™] key to display the Tools menu, and then select "Currency Setup" using the ♠ or ♠ keys.



Press the key.
The Currency Setup screen is displayed.



3 Select an attribute using the ⊕ or ⊕ keys, and then set a value for that attribute using the ⊕ or ⊕ keys, or the numeric keys to enter the conversion rate.



- 4 Press the key to apply the settings.
 - New settings are NOT applied if you do not press the key.



- ullet Press the ullet key to return to the previous step.
- Press the space key to set the selected attribute to the default value.
- Refer to the Currency Conversions Options table for a list of all available settings.

Currency Conversion Options

Attribute	Value	Details
	CHF (Swiss franc)	X'XXX.XX SwF ←→ X'XXX.XX €
	DKK (Danish krone)	DKK X.XXX,XX ←→ € X.XXX,XX
	GBP (British pound)	£X,XXX.XX ←→ €X,XXX.XX
	NOK (Norwegian krone)	Nkr X.XXX,XX ←→ € X.XXX,XX
	SEK (Swedish krona)	SEK X.XXX,XX ←→ € X.XXX,XX
Currency	AUD (Australian dollar)	A\$ X,XXX.XX € X,XXX.XX
	CAD (Canadian dollar)	CA\$ X,XXX.XX ←→ € X,XXX.XX
	HKD (Hong Kong dollar)	HK\$ X,XXX.XX ←→ € X,XXX.XX
	USD (US dollar)	US\$ X,XXX.XX ←→ € X,XXX.XX
	ANY1	X.XXX,XX ←→ € X.XXX,XX
	ANY2	X,XXX.XX ←→ € X,XXX.XX
Order	EUR 1st	X′XXX.XX € / X′XXX.XX SwF
Order	EUR 2nd	X′XXX.XX SwF / X′XXX.XX €
	1	X′XXX.XX € / X′XXX.XX SwF
Separator	(SPACE)	X′XXX.XX € X′XXX.XX SwF
Separator	() (now line)	X′XXX.XX €
	(🗝) (new line)	X'XXX.XX SwF
Rate	Enter the conversion rate	-

















Converting Currency

Press the ** key to display the Tools menu, and then select "Currency Conversion" using the ① or ① keys.

Currency Setup Currency Conversion

LCD Contrast

Press the ← key.
The Currency Conversion screen is displayed.

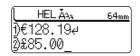
Currency Conversion
EUR → GBP

0.

3 Select the conversion direction using the ⊕ or ⊕ keys, and type in the value to be converted.

(CurrencyConversion) EUR←GBP 85.00

4 Press the key to complete the conversion.



0

Press the key to return to the previous step.

LABEL PRINTING

Label Preview

Using the Preview function you can check the layout of the label before printing it onto the label.

Press the \igosim key.

An image of the label is displayed on the screen. The length of the label is shown in the lower-right corner of the screen.



Press the (-) or (-) keys to scroll the preview to the left or right.

Press the (†) or (*) keys to change the magnification of the preview.



- Press the key to return to the text entry screen.
- To scroll the preview to the left or right end, hold down the (cos) key and press the (+) or (+) kevs.
- To print the label directly from the preview screen, press the (Print) key or open the Print menu and select a print option. Refer to "Printing a Label" below for details.
- The print preview is a generated image of the label, and may differ from the actual label when printed.

Printing a Label

After entering the text and formatting the label, you are ready to print your label. In addition to printing a single copy of a label, your P-touch has several printing features that allow you to print multiple copies of a label, sequentially numbered labels and mirror-printed labels.

- - Do not pull the label coming out of the tape exit slot. Doing so will cause the ink ribbon to be discharged with the tape.
 - Do not block the tape exit slot during printing or when feeding tape. Doing so will cause the tape to jam.
 - Be sure to check that there is enough tape remaining when printing several labels continuously. If tape is running low, set fewer copies or print labels one at a time.
 - Striped tape indicates the end of the tape cassette. If this appears during printing, press the (1) key to turn the P-touch off. Continuing printing may cause damage.

Printing a Single Copy

Make sure that the appropriate tape cassette is inserted and ready for printing.

















LABEL PRINTING

2 Press the me key.
The message shown on the right is displayed while the label is being printed.

Printing... 1/1 Copies

Q 1

To stop printing, press the **(b)** key to turn off the P-touch.

- When the battery is low the message "Recharge Battery!" appears after printing. Recharge the battery before continuing printing, or connect the AC adapter directly to the P-touch to continue printing.
 - There are several other messages that may appear when you press the princh key. Refer to "Error Messages" on page 60 and check the meaning of any messages that appear.

Printing Multiple Copies

Using this function you can print up to 99 copies of the same label.

- 1 Make sure that the appropriate tape cassette is inserted and ready for printing.
- Hold down the key and press the key to display the print options screen, and then select "Copies" using the for keys.



Press the wey key to display the Copies screen, and then select the number of copies to be printed using the of weys, or type the number using the number keys.



Q

Hold down the ① or ① keys to change the number of copies in increments of 5.

4 Press the ← key.

The message shown on the right is displayed while the labels are being printed.

Printing... 2/5 Copies

Q

- Press the key to return to the previous step.
- Unless set otherwise, the tape is automatically cut after each copy is printed. Refer to "Tape Cutting Options" on page 49 to change this setting.
 - The figures shown on the screen during printing indicate the "count / number of copies set".
 - Pressing the space key when setting the number of copies resets the value to 1, the default

Auto-numbering Labels

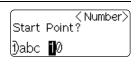
Using the numbering function you can create a set of sequentially numbered labels from a single label format.

- 1 Make sure that the appropriate tape cassette is inserted and ready for printing.
- Hold down the key and press the key to display the print options screen, and then select "Number" using the f or keys.



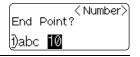
- Press the key.

 The numbering start point screen is displayed
 - To apply auto-numbering to a bar code, select the bar code here. After selecting the bar code you will be promted to enter the number of labels to be printed (step 6).



Move the cursor to the first character to be incremented in the numbering sequence and press the
key.

The numbering end point screen is displayed.



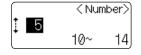
Move the cursor to the last character to be incremented in the numbering sequence and press the
key.

the (—) key.
The number of labels to be printed is displayed.



Select the number of labels to be printed using the ① or ② keys, or type the number using the number keys.

Hold down the (†) or (1) keys to change the number of labels in increments of 5



7 Press the \leftarrow key.

The labels are printed.

As each label is printed the number of copies printed is shown.



















LABEL PRINTING



- Press the (s) key to return to the previous step.
- Unless set otherwise, the tape is automatically cut after each copy is printed. Refer to "Tape Cutting Options" on page 49 to change this setting.
- The figures shown on the screen during printing indicate the "count / number of copies".
- Pressing the space key when selecting the number of copies resets the value to 1, the default.
- Auto-numbering can also be applied to bar codes. When a bar code contains an auto-numbering sequence, no other fields in the label can contain an auto-numbering sequence.
- The auto-number portion of the label is incremented after each label is printed.
- Only one auto-numbering sequence can be used in a label.
- Any symbols or other non-alphanumeric characters in the auto-numbering sequence are ignored.
- An auto-numbering sequence can only contain a maximum of five characters.



Letters and numbers increase as shown below:

```
0 → 1 ...9 → 0 → ...
A → B ...Z → A → ...
a → b ...z → a → ...
A0 → A1 ...A9 → B0 → ...
```

Spaces (shown as underlines "_" in the example below) can be used to adjust the spacing between characters or to control the number of digits that are printed.

Mirror Printing

Using the mirror printing function you can create labels with the text printed in reverse so that they can be read from the opposite side when attached to glass or other transparent material.

- 1 Make sure that the appropriate tape cassette is inserted and ready for printing.
- Hold down the key and press the key to display the print options screen, and then select "Mirror" using the for key.



Press the key.
The message "Mirror Print?" is displayed

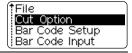


The message shown on the right is displayed while the label is being printed. Printing 1/1 Copies 1/1 Printing 1/1 Printing 1/1 Printing 1/1 Printing 1/1 Printing 1/1 Opies 1/1	4 Press the ← key.	
 Text should be printed on clear tape when using the mirror printing function. The copy and auto-numbering functions cannot be used together with the mirror printing 	The message shown on the right is displayed while	Printing 1/1 Copies

Tape Cutting Options

The tape cutting options allow you to specify how the tape is fed and cut when printing labels. In particular, the "Chain" and "No Cut" options greatly reduce the amount of wasted tape by using smaller margins and eliminating blank sections cut between labels.

11 Press the [™]ck key to display the Tools menu, and then select "Cut Option" using the (†) or (‡) keys.



2 Press the (-) key to display the Cut Option menu, and then select an option using the (\uparrow) or (\downarrow) keys.



- 3 Press the (key to apply the settings.
 - New settings are NOT applied if you do not press the (**←**) kev.
- Press the 🔊 key to return to the previous step. • Refer to the Tape Cutting table for a list of all available settings.

















■ Tape Cutting

Setting	Description	Example
Margin L	Automatically cuts the tape after each label is printed. The labels have a 24 mm margin on the left and right ends.	ABC ABC 24 mm
Margin S	 When printing labels one at a time: Automatically cuts a piece of blank tape before printing the label, and then cuts the tape after the label is printed. When printing several labels continuously: Automatically cuts a piece of blank tape before printing the first label, and then cuts the tape after each label is printed. The labels have a 4 mm margin on the left and right ends. 	22.5 mm ABC ABC 4 mm 4 mm
Chain	 When printing labels one at a time: Automatically cuts a piece of blank tape before printing the label, and then does not cut the tape after the label is printed. When printing several labels continuously: Automatically cuts a piece of blank tape before printing the first label, and then cuts the tape after each label is printed. The labels have a 4 mm margin on the left and right ends. The tape is not fed and cut after the last label is printed. 	22.5 mm ABC ABC 4 mm 4 mm
No Cut	Use this setting to print a strip of labels with no cuts in between. Using the "Cut" key will feed and cut the last label printed.	ABC ABC



- When using Fabric tape, Strong adhesive tapes or any other special tapes, set "No Cut" to
 prevent the cutter from cutting the tape. Leave adequate space between labels when creating
 and printing them, and then use scissors to cut the tape in the space between the labels.
- The tape is not cut after the last label is printed when "Chain" or "No Cut" is set. Press the *\infty\$ key to feed and cut tape automatically, or cut the tape manually if you are using tape that cannot be cut by the cutter.

Attaching Labels

- 1 If necessary, trim the printed label to the desired shape and length using scissors, etc.
- 2 Peel the backing from the label.
- **3** Position the label and then press firmly from top to bottom with your finger to attach the label.
- Q
- The backing of some types of tapes may be pre-cut to make it easier to peel the backing.
- Labels may be difficult to attach to surfaces that are wet, dirty, or uneven. The labels may peel
 off easily from these surfaces.
- Be sure to read the instructions provided with Fabric tape, Strong adhesive tapes or other special tapes and observe all precautions noted in the instructions.

















USING THE FILE MEMORY

You can store up to ten of your most frequently used labels in the file memory. Each label is stored as a file, allowing you to quickly and easily recall your label when needed again.



- When the file memory is full, each time you save a file you will need to overwrite one of your stored files
- Labels created using the Auto-Format function cannot be stored in the memory.
- You will lose your stored files if the AC adapter is disconnected and the battery charge runs out

Storing a Label into Memory

11 After entering the text and formatting the label, press the key to display the Tools menu, and then select "File" using the (†) or (*) keys.



2 Press the (key to display the File screen, and the select "Save" using the (†) or (*) keys.



3 Press the (key. A file number is displayed.



4 Select a file number using the (†) or (*) key, and then press the (key to save the label under the selected file number



The file is saved and the screen returns to the text entry screen.



- Press the key to return to the previous step.
- Up to 153 characters can be saved in one file, depending on the number of lines. However, there is a maximum of 459 characters for the total number of characters saved in up to 10 files. Text and layout formatting data is also saved in the file.

Opening a Stored Label File

1 Press the ™ key to display the Tools menu, and then select "File" using the ↑ or ↓ keys.



Press the key to display the File screen, and then select "Open" using the or keys.



Press the key.
The file number of a stored label is displayed.
The label text is also displayed to identify the label.

Only file numbers of files with label data stored are



FLO Ă¾ AA 68mm

displayed.



4 Select a file number using the ♠ or ♠ key, and then press the ♠ key to open the selected file.

The file is opened and displayed on the text entry screen.



- Press the 🐯 key to return to the previous step.
- The message "No Files!" is displayed when there are no files stored in memory.

















displayed.

Deleting a Stored Label File

1 Press the ** key to display the Tools menu, and then select "File" using the (†) or (‡) keys.



2 Press the (key to display the File screen, and then select "Delete" using the (†) or (†) keys.



3 Press the (-) key. The file number of a stored label is displayed. The label text is also displayed to identify the label.

Only file numbers of files with label data stored are



4 Select a file number using the (†) or (1) key, and then press the (\leftarrow) key. The message "Delete?" is displayed.



- 5 Press the (-) key to delete the file. The file is deleted and the screen returns to the text entry screen.
- Press the key to cancel deleting the file and return to the previous screen.
 - The message "No Files!" is displayed when there are no files stored in memory.

MAINTAINING YOUR P-touch

Resetting the P-touch

You can reset the internal memory of your P-touch when you want to clear all saved label files, or in the event the P-touch is not behaving normally.

_____ With the power turned off, hold down the ⊚ and ℝ keys and press the ⊚ key. The P-touch turns on with the internal memory reset.

Release the **(b)** key before releasing the other keys.

All text, format settings, option settings and stored label files are cleared when you reset the P-touch.

Maintenance

Your P-touch should be cleaned on a regular basis to maintain its performance and life span. We recommend that you clean it at least once every month.

Always turn the P-touch off before cleaning.

Cleaning the Main Unit

Wipe any dust and marks from the main unit using a soft, dry cloth. Use a slightly dampened cloth on difficult to remove marks.

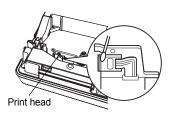
Do not use paint thinner, benzene, alcohol or any other organic solvent. These may deform the case or damage the appearance of your P-touch.

Cleaning the Print Head

Streaks or poor quality characters in printed labels generally indicates that the print head is dirty. Clean the print head using a cotton swab or optional print head cleaning cassette (TZ-CL4).



- Do not touch the print head directly with your bare hands.
- Refer to the instructions provided with the print head cleaning cassette for directions on how to use it.

















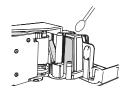


Cleaning the Tape Cutter

Tape adhesive can build up on the cutter blade after repeated use, taking the edge off the blade which may result in the tape jamming in the cutter.

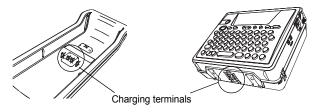


- About once every year, wipe the cutter blade using a cotton swab moistened with alcohol.
- Do not touch the cutter blade directly with your bare hands.



Cleaning the Charging Terminals

Wipe the charging terminals using a soft, dry cloth or cotton swab.





- Clean terminals at least once every month.
- Always unplug the AC adapter from the electrical outlet before cleaning the terminals.

TROUBLESHOOTING

What to do when...

Problem	Cause	Solution	
The screen 'locks', or the P-touch does not respond normally.	Refer to "Resetting the P-touch" on page 55 and reset the internal memory to the initial settings. If resetting the P-touch does not solve the problem, disconnect the AC adapter and remove the rechargeable battery for more than 5 minutes.		
The display remains blank after turning on the power.	Is the AC adapter connected correctly?	Check that the AC adapter designed exclusively for your P-touch is connected correctly.	
	Are you using the correct AC adapter?	Make sure that you are using the AC adapter designed exclusively for your P-touch (included in package).	
	Is the rechargeable battery fitted correctly?	Remove and re-fit the rechargeable battery.	
	Is the rechargeable battery charged sufficiently?	The battery's charge may be low. Charge the battery. (The battery's charge may run low even when you are not using the P-touch.)	
The battery cannot be charged.	Is the AC adapter connected to the battery charger correctly?	Check that the AC adapter is connected to the battery charger correctly.	
	Are the charging terminals clean?	If they are not clean, turn off the P-touch and wipe the charging terminals with a dry cloth or cotton swab.	



















Problem	Cause	Solution
The label is not printed after pressing	Has text been entered?	A label will not be printed if there is no text entered.
the (Print) key.	Is the tape cassette installed correctly, and is there enough tape remaining?	Check the tape cassette is installed correctly, and that there is enough tape remaining.
	Is the end of the tape bent?	If bent, cut the bent section of tape with scissors and thread the tape through the tape exit slot correctly.
	Is the tape jammed?	If jammed, remove the tape cassette, carefully pull out the jammed tape, and then cut the tape with scissors. Check that the end of the tape passes through the tape guide, and reinstall the tape cassette.
The label is not printed correctly.	Is the tape cassette installed correctly?	When installing a cassette, press firmly until it clicks into place.
	Is the print head clean?	If not, clean the print head using a cotton swab or optional print head cleaning cassette (TZ-CL4).
	Is Cut Option set to Chain or No Cut?	When these options are set, the tape is not fed after printing the label. Check the Cut Option setting, or press the ⊛ key to feed and cut the tape.
	Is the rechargeable battery charged sufficiently?	If the message "Recharge Battery!" is displayed, charge the battery.

Problem	Cause	Solution
The ink ribbon is separated from the ink roller.	Is the ink ribbon in the tape cassette loose, or did you pull on the label coming out of the tape exit slot?	If the ink ribbon is broken replace the tape cassette. If not, leave the tape uncut and remove the tape cassette, then wind the loose ink ribbon onto the spool as shown in the figure.
The P-touch stops while printing a label.	Is there enough tape remaining in the tape cassette?	The striped tape indicates you have reached the end of the tape. Replace the tape cassette when the striped tape appears.
	Is the battery low and the AC adapter not connected?	Load the battery or connect the AC adapter directly to the P-touch.
The label is not cut automatically.	Is Cut Option set to Chain or No Cut?	When these options are set, the tape is not fed after printing the label. Check the Cut Option setting, or press the ® key to feed and cut the tape.
Label files saved previously are now empty.	Have the battery and AC adapter been disconnected?	All data stored in the internal memory is lost if the battery and AC adapter are disconnected for longer than five minutes.
	Is the battery charged?	All data stored in the internal memory is lost if the battery runs down.
	Have you used the Reset function?	The reset function clears all data stored in the internal memory, including label files.







Error Messages

When an error message appears on the display, follow the directions provided below.

 \mathbb{Q}

Press any key to clear the error message.

Message	Cause/Remedy
Recharge Battery!	The rechargeable battery is running low. Charge the battery or connect the AC adapter before continuing.
Wrong Type Of Adapter Connected!	An incompatible AC adapter is connected. Use only the AC adapter designed exclusively for the rechargeable battery provided with your P-touch.
① Cutter Error!	The tape cutter is closed when you try to print or feed tape. Turn the P-touch off and then on again before continuing. When tape is tangled in the cutter, remove the tape.
No Text!	There is no text, symbols or bar code data entered when you try to print or preview a label. Enter data before continuing.
Insert Tape Cassette!	There is no tape cassette installed when you try to print or preview a label, or feed tape. Install a tape cassette before continuing.
Tape Cassette Changed!	The tape cassette is changed while printing, etc. Make sure the correct tape cassette is inserted before printing.
Line Limit! Max 5 Lines	There are already five lines of text when you press the key. Limit the number of lines to five.
Tape Width Limit! Max 3 Lines	There are already three lines of text when you press the or key while using 12 mm tape. Limit the number of lines to three.
Tape Width Limit! Max 2 Lines	There are already two lines of text when you press the him or key while using 9 mm or 6 mm tape. Limit the number of lines to two.
Text Full!	The maximum number of characters have already been entered. Edit the text and use fewer characters.

Message	Cause/Remedy
• Length Limit!	The length of the label to be printed using the text entered is longer than 1 m. Edit the text so that the length of the label is less than 1 m.
Insert 18mm Tape Cassette!	An 18 mm tape cassette is not installed when an Auto-Format for 18 mm tape is selected. Install an 18 mm tape cassette.
Insert 12mm Tape Cassette!	A 12 mm tape cassette is not installed when an Auto-Format for 12 mm tape is selected. Install a 12 mm tape cassette.
Insert 9mm Tape Cassette!	A 9 mm tape cassette is not installed when an Auto-Format for 9 mm tape is selected. Install a 9 mm tape cassette.
Insert 6mm Tape Cassette!	A 6 mm tape cassette is not installed when an Auto-Format for 6 mm tape is selected. Install a 6 mm tape cassette.
① Text Full For This Layout!	The maximum number of characters for the selected layout have already been entered. Edit the text to use fewer characters or use a different layout.
① Incorrect Value!	The value entered for the tape length is invalid. Enter a valid value for the tape length.
Select Other Cut Option!	The tape length set using the "Fixed" tape length setting is shorter than the total length of the left and right margins applied for the "Margin L" cutting option. Select a different cutting option.
Text Too Long!	The length of the label to be printed using the text entered is longer than the length setting. Edit the text to fit within the set length or change the length setting.
• No Files!	There are no files stored in the internal memory when you try to open or delete a file. Save a label file first.
① Memory Full!	There is not enough internal memory available when you try to save a label file. Delete any unnecessary files to make more memory available for the new label file.





TROUBLESHOOTING

Message	Cause/Remedy
Over 10 Digits!	The result of the currency conversion exceeds 10 digits. Enter a smaller value for conversion.
nput Rate!	There is no exchange rate entered for the currency conversion. Enter an exchange rate.
4 Digits Minimum!	The bar code data entered is less than the minimum four digits. Enter a minimum of four digits for the bar code data.
Check # Of Digits Entered!	The number of digits entered in the bar code data does not match the number of digits set in the bar code parameters. Enter the correct number of digits.
Input A,B,C,or D At Begin&End!	The bar code data entered does not have the required start/ stop code (A, B, C, or D required at the beginning and end of the bar code data for the CODABAR protocol). Enter the bar code data correctly.
Maximum Of 1 Bar Code Per Label!	There is already a bar code entered in the text data when you try to enter a new bar code. You can only use one bar code in each label.

APPENDIX

Specifications

Main Unit

Item		Specification
Input D	evice (Keyboard)	58-key, QWERTY layout keyboard
Display	1	
	Display device	Dot matrix LCD
	Character display	15 characters x 2 lines (48 dot x 128 dot)
Printing	9	
	Print method	Thermal printer
	Print head	128 dot / 180 dpi (112 dots used)
	Print height	15.8 mm max. (when using 18 mm tape)
	Print speed	Approx. 10 mm / sec.
	Tape cassette	Standard TZ tape cassette (6, 9, 12, 18 mm widths)
	Tape cutter	Built-in automatic cutter
	No. of lines	18 mm tape: 1 ~ 5 lines; 12 mm tape: 1 ~ 3 lines 9 mm tape: 1 ~ 2 lines; 6 mm tape: 1 ~ 2 lines
	Print direction	Horizontal, Vertical
	Continuous printing	1 ~ 99 labels
	Print preview	Yes
	Cut and feed	Margin L, Margin S, Chain, No Cut
Charac	ters	
	Internal character set:	Total of 283 characters (62alphanumeric, 103 symbols, 119 accented characters, note that one character appears in both symbols and accented characters)
	Text buffer	153 characters max.
	Fonts	Helsinki, Brussels, Florida, Belgium
	Character size	L, M, S (Auto selection from 7 font sizes: 6, 9, 12, 18, 24, 36, 42 points)
	Character style	Normal, Bold, Outline, Shadow, Italic, Vertical, Italic Bold, Italic Outline, Italic Shadow, Vertical Bold, Vertical Outline, Vertical Shadow
	Character width	2, 1, 2/3, 1/2
	Text alignment	Left, Centre, Right















	Item	Specification	
Momo		Specification	
Memoi	<u></u>	Ind. : 450 1	
	Memory size	Maximum 459 characters	
	File storage	Maximum 10 files	
Other I	Features		
	Frame	Total of 14 frame patterns (Including Underline)	
	Auto-Format	Templates: 10 Block layouts: 18 mm: 8, 12 mm: 4, 9 mm: 3, 6 mm: 1	
	Screen contrast	5 levels (+2, +1, 0, -1, -2)	
Power	Power Supply		
	Power supply	AC adapter (Model-H1), rechargeable battery pack (BA-18R)	
	Auto Power-off	Battery: 5 min.*, AC adapter: 1 hour *When using P-touch only. When connected to a PC, 5 min. with no operation, 1 hour after printing from PC.	
Size	Size		
	Dimensions	149 mm (W) x 52 mm (D) x 122.5 mm (H)	
	Weight	580 g (without a tape cassette and battery installed)	
Other			
	Operating temperature / humidity	10 ~ 35°C / 20 ~ 80% humidity (without condensation) Maximum wet bulb temperature: 27°C	

Rechargeable battery

Item	Specification
Туре	Nickel metal hydride (Ni-MH)
Dimensions	90.9 mm (W) x 20.7 mm (D) x 20.7 mm (H)
Weight	Approx. 90 g
Voltage	8.4 V, 500 mAh
Power consumption	Approx. 4 W (when charging)
Charging time	Approx. 12 hours

PC Operating Environment

ltem	Specification
OS	Pre-installed Microsoft [®] Windows [®] 98, 98SE, Me, 2000 Professional, XP Home Edition or XP Professional Edition
CPU	Intel® Pentium® 266MHz or higher required (700MHz or higher recommended)
Memory	64M bytes or more required
Hard disk	50M bytes or more required
Monitor	800 x 600 (SVGA) / High Colour or higher graphics card
Interface	USB 1.1 or later specification
Other	CD-ROM drive for installation















Accessories

Brother recommends the use of genuine Brother accessories (tape cassettes, AC adapter, rechargeable battery, etc.) with your P-touch. The use of other products may effect the print quality or may damage your P-touch. Availability of accessories subject to change without notice.

Tape Cassettes

Tape supply may differ by country.



Do not use tapes that do not have the **T** mark.

■ Laminated tapes (length: 8 m)

The surface of laminated tapes is protected by a transparent film. This prevents characters from smudging or being erased if the label becomes wet.

Stock No.	Description
18 mm	
TZ-141	Black characters on clear tape
TZ-241	Black characters on white tape
TZ-242	Red characters on white tape
TZ-243	Blue characters on white tape
TZ-344	Gold characters on black tape
TZ-145	White characters on clear tape
TZ-345	White characters on black tape
TZ-441	Black characters on red tape
TZ-541	Black characters on blue tape
TZ-641	Black characters on yellow tape
TZ-741	Black characters on green tape
12 mm	
TZ-131	Black characters on clear tape
TZ-132	Red characters on clear tape
TZ-133	Blue characters on clear tape
TZ-135	White characters on clear tape
TZ-231	Black characters on white tape
TZ-232	Red characters on white tape
TZ-233	Blue characters on white tape
TZ-334	Gold characters on black tape
TZ-335	White characters on black tape
TZ-431	Black characters on red tape

Stock No.	Description
TZ-435	White characters on red tape
TZ-531	Black characters on blue tape
TZ-535	White characters on blue tape
TZ-631	Black characters on yellow tape
TZ-635	White characters on orange tape
TZ-731	Black characters on green tape
TZ-735	White characters on green tape
TZ-931	Black characters on silver tape
TZ-M931	Black characters on silver (mat) tape
TZ-A31	Black characters on grey tape
TZ-B31	Black characters on fluorescent orange tape (length: 5 m)
TZ-C31	Black characters on fluorescent yellow tape (length: 5 m)
TZ-D31	Black characters on fluorescent green tape (length: 5 m)
TZ-M31	Black characters on clear (mat) tape
9 mm	
TZ-121	Black characters on clear tape
TZ-122	Red characters on clear tape
TZ-123	Blue characters on clear tape
TZ-221	Black characters on white tape
TZ-222	Red characters on white tape
TZ-223	Blue characters on white tape
TZ-324	Gold characters on black tape
TZ-325	White characters on black tape
TZ-421	Black characters on red tape
TZ-521	Black characters on blue tape
TZ-621	Black characters on yellow tape
TZ-721	Black characters on green tape
TZ-A25	White characters on grey tape
TZ-M21	Black characters on clear (mat) tape
6 mm	
TZ-111	Black characters on clear tape
TZ-211	Black characters on white tape
TZ-315	White characters on black tape
TZ-611	Black characters on yellow tape



















■ Non-laminated tapes (length: 8 m)

Stock No.	Description
18 mm	
TZ-N241	Black characters on white tape
TZ-N242	Red characters on white tape
TZ-N243	Blue characters on white tape
TZ-N541	Black characters on blue tape
TZ-N641	Black characters on yellow tape
TZ-N741	Black characters on green tape
TZ-NF41	Black characters on purple tape
TZ-PH41	Black characters on tape with a heart design (length: 4 m)
TZ-PF41	Black characters on tape with a fruit design (length: 4 m)
TZ-PM41	Black characters on tape with a marine design (length: 4 m)
12 mm	
TZ-N231	Black characters on white tape
TZ-N232	Red characters on white tape
TZ-N233	Blue characters on white tape
TZ-N531	Black characters on blue tape
TZ-N631	Black characters on yellow tape
TZ-N731	Black characters on green tape
TZ-NF31	Black characters on purple tape
9 mm	
TZ-N221	Black characters on white tape
6 mm	
TZ-N211	Black characters on white tape

■ Strong adhesive tapes (length: 8 m)

Laminated tapes with stronger adhesive, ideal for rough surfaces or harsh environments.

Stock No.	Description
18 mm	
TZ-S141	Black characters on clear tape
TZ-S241	Black characters on white tape
TZ-S641	Black characters on yellow tape
12 mm	
TZ-S131	Black characters on clear tape
TZ-S231	Black characters on white tape

Stock No.	Description
TZ-S631	Black characters on yellow tape
9 mm	
TZ-S121	Black characters on clear tape
TZ-S221	Black characters on white tape
TZ-S621	Black characters on yellow tape
6 mm	
TZ-S111	Black characters on clear tape
TZ-S211	Black characters on white tape
TZ-S611	Black characters on yellow tape

■ Flexible ID tapes (length: 8 m)

Flexible laminated tapes ideal for labelling network cables, electrical wires, etc.

Stock No.	Description
18 mm	
TZ-FX141	Black characters on clear tape
TZ-FX241	Black characters on white tape
TZ-FX641	Black characters on yellow tape
12 mm	
TZ-FX131	Black characters on clear tape
TZ-FX231	Black characters on white tape
TZ-FX631	Black characters on yellow tape
9 mm	
TZ-FX121	Black characters on clear tape
TZ-FX221	Black characters on white tape
TZ-FX621	Black characters on yellow tape
6 mm	
TZ-FX111	Black characters on clear tape
TZ-FX211	Black characters on white tape
TZ-FX611	Black characters on yellow tape

■ Security tape (length: 8 m)

This tape leaves a checkered pattern when removed.

Stock No.	Description
18 mm	
TZ-SE4	Black characters on white tape

















APPENDIX

■ Fabric tape (length: 3 m)

These fabric labels can be affixed to other fabric using an iron.

Stock No.	Description
12 mm	
TZ-FA3	Blue characters on white tape

■ Print head cleaning cassette

Cassette tape for cleaning the print head of your P-touch.

Stock No.	Description		
18 mm			
TZ-CL4	Print head cleaning cassette (cleans approx. 100 times)		

AC Adapter

Stock No.	Description		
Model-H1			

Rechargeable Battery

Stock No.	Description
BA-18R	

INDEX

A		
AC adapter		
accented Character List		
aligned		
Auto power-off time21		
В		
Battery charger 12		
C		
Caps mode 13, 23		
Composite Character List		
Composite characters		
contrast		
cursor keys23		
D		
deleting		
text and formatting		
text only24		
E		
entering		
accented characters		
symbols 24		
text		
uppercase letter23		
F		
Feed & Cut function		
fonts		
formatting		
character attributes		
label attributes30		
K		
Keyboard 13		
L		
length		
Line number		

N	
new line	23
P	
Power Supply	16
R	
rechargeable battery	
charging	17
installing	
replacing	18
Return mark	13
S	
size	20
styleSymbol List	
symbols	
_	
Т	
tape cassettes	
tape lengthtext	13
entering and editing	
lines	23
U	
uppercase letter	23
w	
width	20
wiuii	∠0

















