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Declaration

1. “硕方” and “Supvan” are registered trademarks of Supvan Technology (Beijing) Co., Ltd.
2. For any information about the instruction contents, Supvan reserves the right to vary because of the upgrade of tube printer.
3. Supvan will not be responsible for any consequence caused by operations which do not follow the requirements of instructions.
4. If you want to know more about the machine or Supvan, please visit www.supvan.com.

Precautions

Warning

1. Please use a single power socket. Do not use any socket inserted with multiple devices, this may cause a fire or electric shock.
2. Do not let any metal or liquid get into tube printer. This may cause fire or electric shock or machine damage.
3. Do not use power plug with wet hand in case of any electric shock.
4. When open the upper cover, do not let any object contact with the moving part of tube printer.
5. Use voltage between 100 and 240V AC. If not, it may result in fire, electrical shock or machine failure.
6. Do not disassemble or modify the tube printer without any authorization. This may lead to fire or electric shock.
7. Please let the tube printer away from alcohol, gasoline and other flammable solvents as well as any ignition source to prevent any deflagration and fire.
8. When clean the tube printer, please use wet gauze that has been twisted closely. Do not use any flammable organic solvent.
9. When find any abnormal smell or noise in operation, please turn off the tube printer immediately, pull out its plug and contact with your dealer.
10. Please use the tube printer in a clean place. Do not use it on carpet. Otherwise, the dust may cause short circuit or even fire.
11. When there is any foreign object getting into the tube printer, do not use it in case of any damage.
12. The machine can only print $\Phi \leq 6.0\text{mm}$ tube or heat shrink tube. Printing $\Phi > 6.0\text{mm}$ tube may affect the print effect, cause a printing error, or even damage the print head.

Caution

1. Not all consumables are suitable for your tube printer because of the difference of consumable specification. Please choose Supvan original consumables to enjoy the premium print quality and avoid malfunction of the printer.
2. Supvan will not be responsible for any warranty caused by counterfeit ribbon or label.
3. Do not touch the print head with hand.
4. Please use the cutter carefully to avoid injured.
5. Touching the print head which just finished working may cause your skin being burnt.
6. Please keep the printer away from high moisture environment in case of electric shock.
7. If the machine will not be used for a long time, unplug the AC adapter from the power outlet. Otherwise, electrical leakage may occur.
8. The machine is very precision. Please operate it on a flat surface to prevent falling damage or shock vibration.
9. Do not compress your tube printer.
10. Keep away from any electromagnetic interference which generates a magnetic field.
11. Do not block the outlet of the printer.
12. Do not press the keyboard too hard.
13. In operation, do not pull out any print media forcibly from the outlet. Take it out after cutting. Otherwise, this will affect the printing result or damage your tube printer.
14. Consumables or tube printer shall be stored in a dry place with ventilation, room temperature, and non-direct sunlight.

Feature

1. Multilingual operating system, supporting 16 system languages, with special key for multilingual input.
2. Fast printing speed, achieving batch rapid printing.
3. LCD with white backlight.
4. Powerful function keys make operation more convenient and simple.
5. Standard 78-key QWER layout keyboard.
6. With memory function in case of power-down.
7. Automatic half/full cutting functions.
8. Memory capacity can store up to 64 files for easy calls at any time.
9. Can use SD card to achieve file backup and offline printing
10. PC connect,able to import Excel for batch printing
11. Its portable design suits various occasions.
12. The hard case is reliable which can protect the tube printer effectively.

Included Items

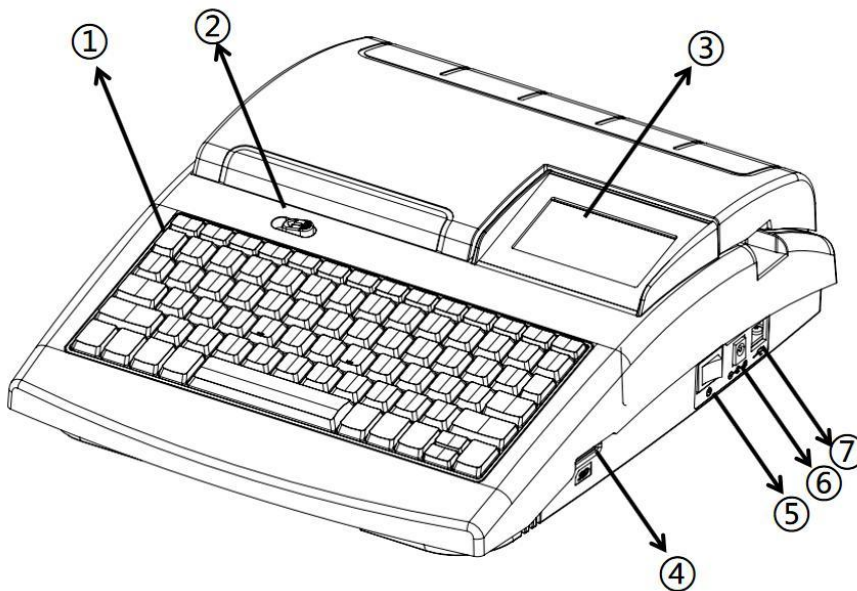
1. One Supvan TP86E Tube Printer
2. One Tube Adjuster
3. One Ribbon Cassette (Black)
4. One Label Cassette (Random color and size)
5. One Power Adapter (Including Power Cord)
6. One USB Computer Cable
7. One User Manual
8. One SD Card
9. One SD Card Reader
10. One Qualified Certificate
11. One Test Printing Sample
12. One Hard Case

Specification

Model	TP86E
Printing method	Thermal transfer
Resolution	300dpi
Printing speed	50pcs/min,20mm/pcs
Ink Ribbon length	Black:100m,White:80m,Red:80m
System language	16
Character size	Label:1-7 Tube:1-5
Repeat	1-200
Media cutting method	Automatic half-cutting, Automatic full-cutting
Media type	Tube, Heat shrink tube, Label,Plate
Keyboard	78keys QWER layout keyboard
Dimension(L×W×H)	319mm×273mm×93mm
Weight	3.2kg(printer only)
Power supply	AC adapter(Input : 100-240V 50/60Hz, Output:13.5V-3.0A)
Display	LCD with white back light ;2 lines editing is possible
Internal memory	Up to 64 Files
External memory	SD card available
Operating environment	15°C-35°C
PC interface	Professional editing software,support Excel import
Tube	PVC tubeΦ2.5-Φ6mm, Heat shrink tube Φ2.5-Φ6mm
Label	Exclusive cassettes(White, yellow, silver) Widths:6mm, 9mm,12 mm.Length:16m
Insert Stick Plate	4mm plate

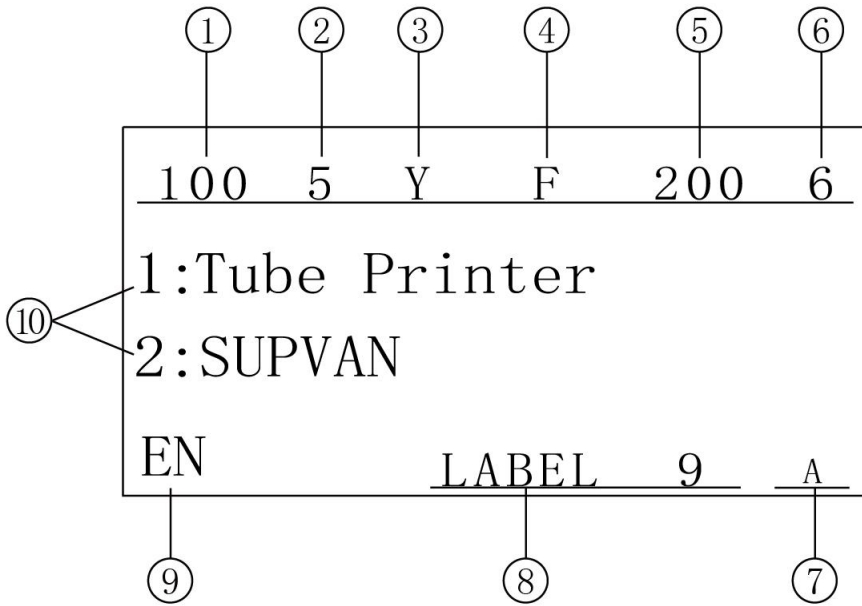
Chapter 1 Appearance Description and Configuration

1.1 Appearance Parts of Supvan Tube Printer



SEQ	Name
1	Keyboard
2	Cover opening button
3	LCD display
4	SD card slot
5	Switch
6	Power outlet
7	USD port

1.2 LCD Display Description



No.	Key words	Description
1	Seg Length	Length of segment that cursor locates
2	Char Size	Character size of segment that cursor locates
3	Set Cut	Setting cut state between segments: Normal; Half cut; Solid line
4	Frame	Frame setting state of segment that cursor locates. Normal; Frame; Underline
5	Repeat	Repeat printing times of segment that cursor locates.
6	Density	Setting value of density level.
7	Caps Lock	Current setting state of letter uppercase/lowercase
8	Media	The setting type of printer media
9	Language	Current system language
10		Display content: Segment numbering and segment content.

1.3 Key Functions

No.	Key words	Description
1	ESC	Cancel the current setting, operation, or error description and can go back to upper menu
2	Media	Select print consumable type (PVC tube, heat shrink tube, label ,plate)
3	Seg Length	Set the length of the segment, which can be set to automatic and specified(6-100mm)
4	Char Size	Set the font size for the current and following segments, and enable automatic and specified font sizes
5	Repeat	Set the number of repeated prints of the current segment that the cursor is at, and the following segment
6	Frame	Set underline and various frames of the current segment that the cursor is at, and the following segment
7	Vertical	Set print data direction of the segment where the cursor is at, and all the following segments , can set horizontal,vertical and rotate,default is horizontal direction)
8	Char Space	Set the distance between characters and the distance between lines
9	Density	Set print density
10	Align	Set the alignment for the edited print content (default is center), include (center, left, right, justify, and adjust print position)
11	SEQ	Set alphabet or number sequence (one setting for each segment)
12	Set Cut	Set half cut or solid line between segments, and set cut depth
13	File	Create / save / open / delete file + clear storage
14	Stop	Cancel the print job in progress
15	^{Lng} A/a	Switch upper and lower cases,Long press for the system language selection
16	ÂÄ...	Select variant of the Latin letter
17	Test	To solve the discrepancy problem between set media segment length and actual print length
18	Print	Print all the currently edited files
19	Set	Font Character Width Low Tem.Print Segment Length Calibration Print Position Adjustment

		Half cut Depth Adjustment SEQ Priority Contrast Brightness Factory Reset
20	Symbol	Insert symbol
21	X ² X ₂	Superscript and subscript
22	Double Rows	Set 2 rows of characters in one segment
23	Delete	Select delete
24	Rev.Feed	Make rubber roller reversal; if the printed media entangles on the roller and is unable to be pulled out, use this function to reverse the roller, which helps taking out the media

Chapter 2 Consumable Installation

As an equipment manufacturer, Supvan can provide only four major categories of consumable media including ribbon, label, tube, and cutter group. For other consumable media, please contact with your supplier.

2.1 Installation and Removal of Ribbon Cassette

2.1.1 Installation of ribbon cassette

- (1) See Figure 1. Tighten the ribbon according to the direction of arrow on ribbon cassette.
- (2) Put the print head in a non-printable position.
- (3) See Figure 2. Place the ribbon cassette at the position marked on tube printer.

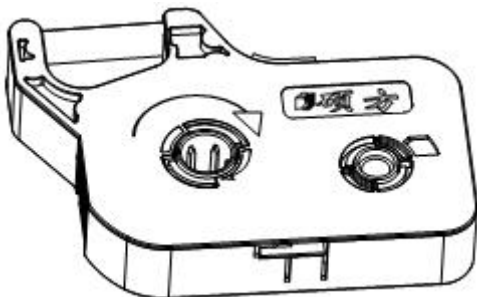


Figure 1 Tighten the Ribbon

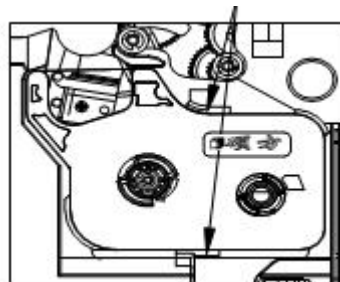
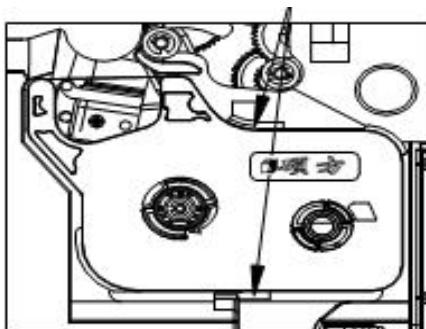


Figure 2 Ribbon Cassette Installation

2.1.2 Removal of ribbon cassette

- (1) Make the print head in a non-printable position.
- (2) Press the clamping tongue inward with a finger to lift it upward so as to remove the ribbon cassette easily according to the direction of arrow in the following figure.

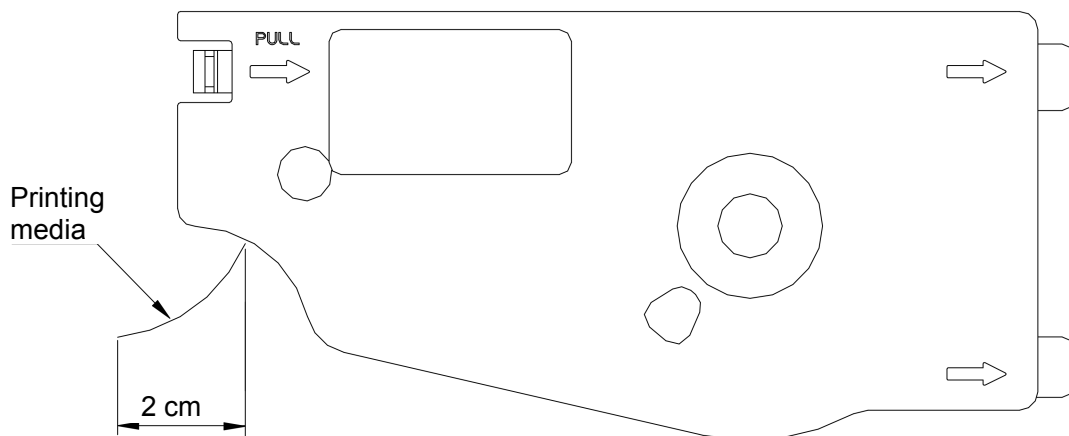


2.2 Installation and Removal of Label Cassette

2.2.1 Installation of label cassette

- (1) Open the upper cover.

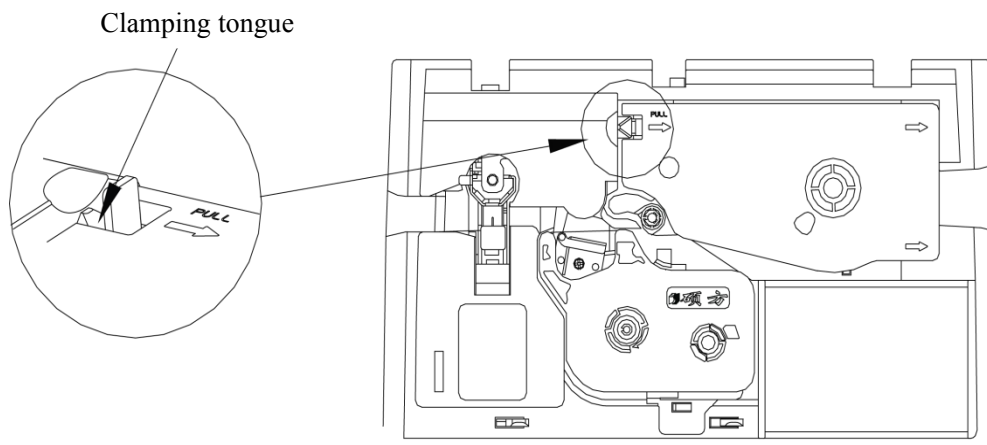
Please pull the label about 2cm out of the outlet of label cassette. See the following figure.



- (2) Align the tabs on the label cassette with the holes in the printer, and then push the label cassette in until it clicks into the place.
- (3) Ensure the front end of label exits the pinch roller.

Note:

- Please ensure that the clamping tongue in the left of label cassette has been returned.



- (4) Close the upper cover.

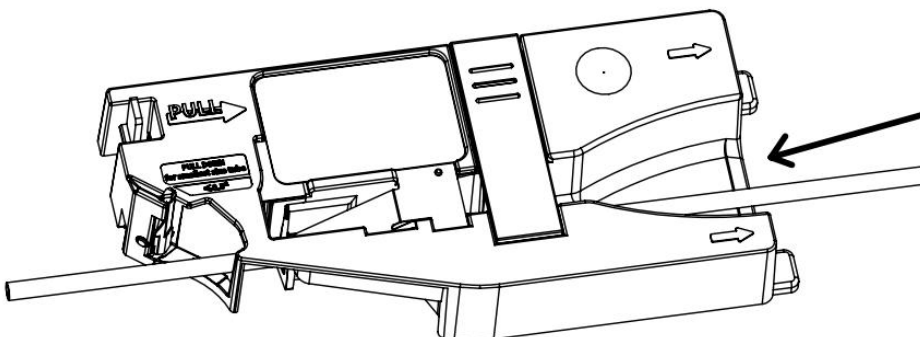
2.2.2 Removal of label cassette

- (1) Open the upper cover.
- (2) Make the print head in a non-printable state.
- (3) Press the clamping tongue in the left of label cassette and lift upward the cassette at the same time.
- (4) Close the upper cover.

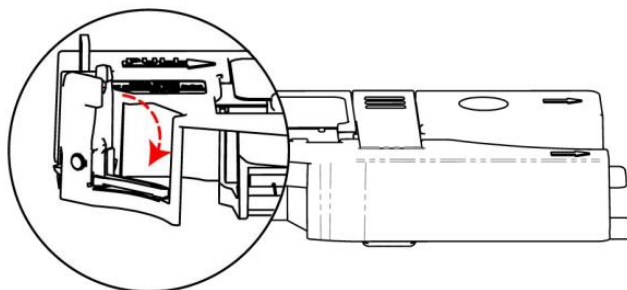
2.3 Installation and Removal of Tube and Tube Adjuster

2.3.1 Installation of tube

Insert the tube into the tube adjuster, pass through the cleaning sponge and spring compression plate of the tube adjuster.

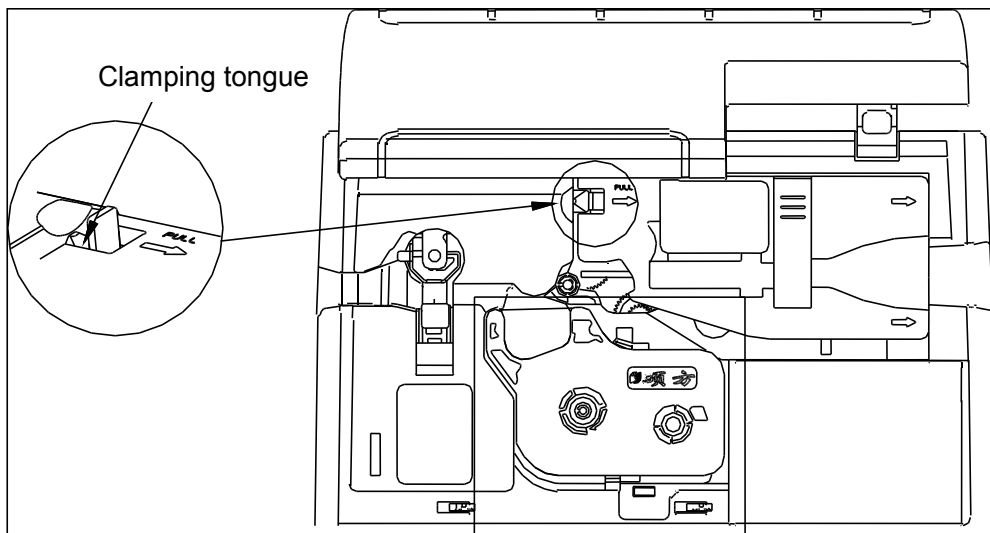


Note: When the printing small size tube cannot be printed completely, put down the lever to ensure the tube can be printed completely



2.3.2 Installation of tube adjuster

- (1) Open the upper cover.
- (2) Align the tabs on the tube adjuster with the holes in the printer, and then push the tube adjuster in until it clicks into the place.
- (3) Close the upper cover.



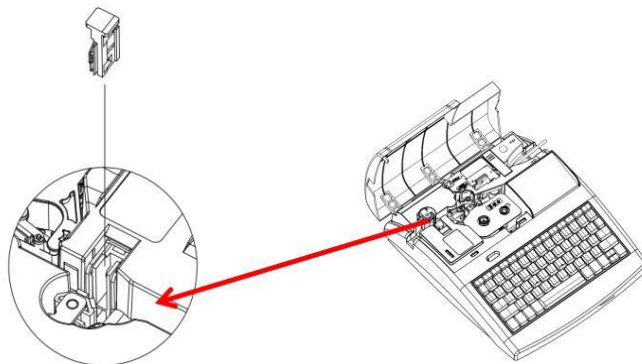
2.3.3 Removal of tube adjuster

- (1) Open the upper cover.
- (2) Press the clamping tongue at left of tube adjuster and lift it upward at the same time.
- (3) Close the upper cover.

2.4 Replacement of Half-cutter and Cutting Board Assembly

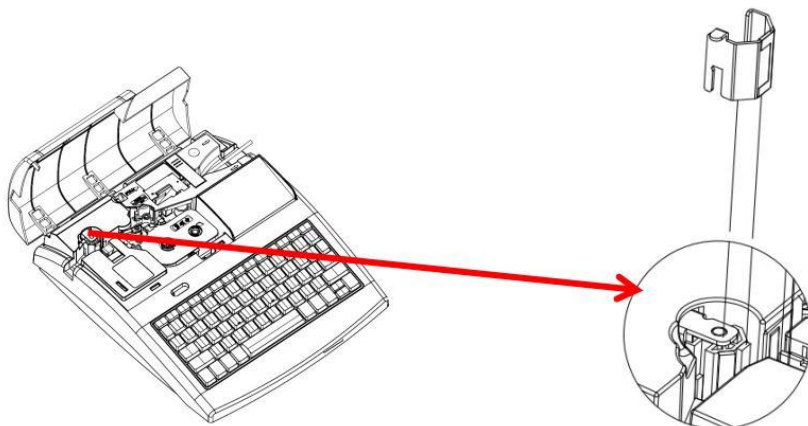
2.4.1 Replacement of cutter

Pull the old cutter out, and insert a new one.



2.4.2 Replacement of cutting board assembly

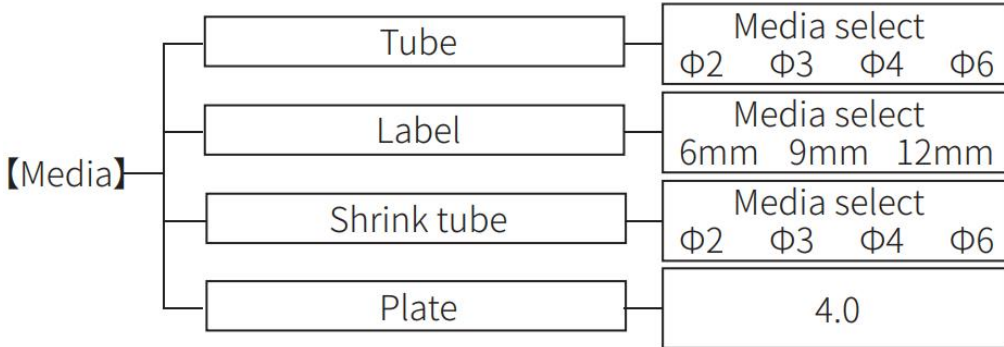
- (1) Take the label or tube out of tube printer.
- (2) Pull out the old cutting board assembly.
- (3) Insert a new one.



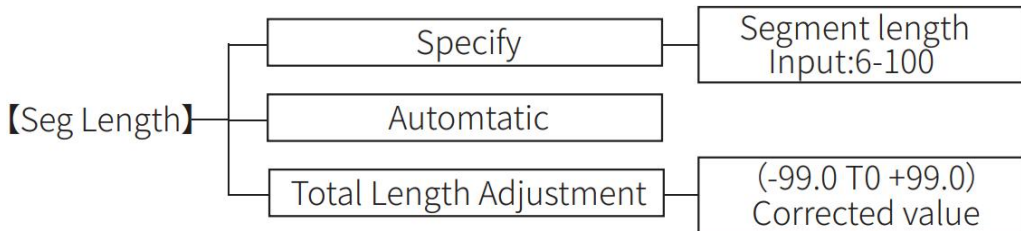
Note:

- Please be careful not to hurt your fingers when replace any cutter and cutting board assembly.
- When the cutter has been used for long time and the half-cutting effect is not good, please replace the complete set of cutter and cutting board assembly at the same time.

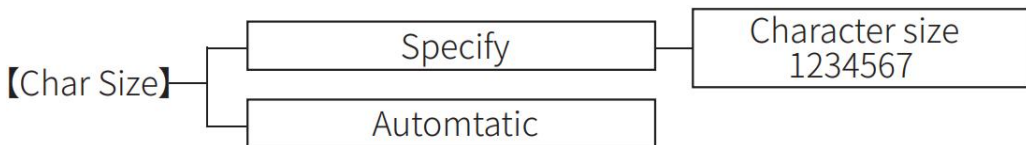
Chapter 3 Main Function Keys



✓Select the type and size of consumables corresponding to the consumables loaded into the printer



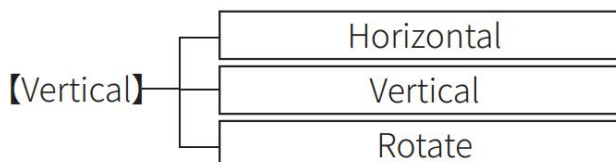
✓Set length of segment which can be specified or automatically adjusted
 Note: The setting only takes effect at and below the cursor position



✓Set character size which can be specified or automatically adjusted
 Note: The setting only takes effect at and below the cursor position

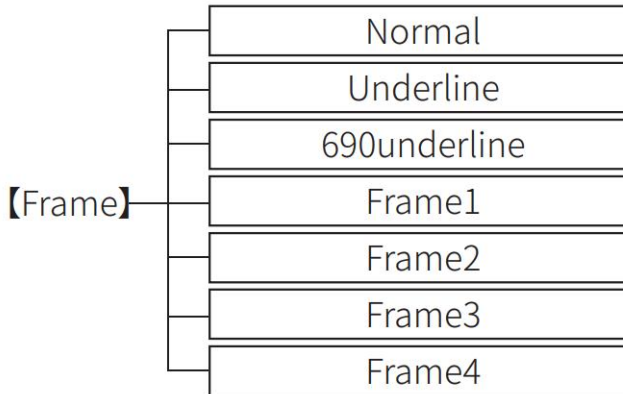


✓Set the number of times to repeat printing
 Note: The setting only takes effect at and below the cursor position

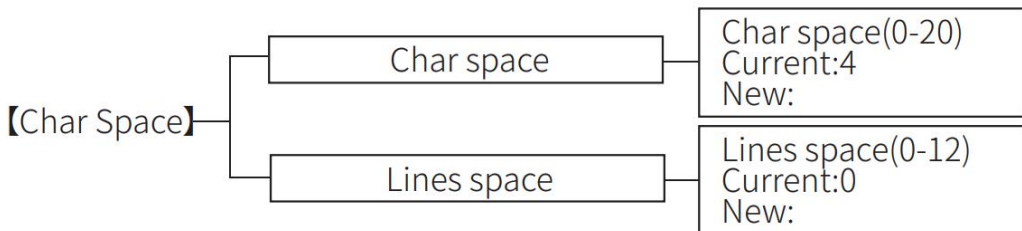


✓Set the direction of segment content

Note: The setting only takes effect at and below the cursor position



✓Set underline ,690underline,frame.Normal mean no setting



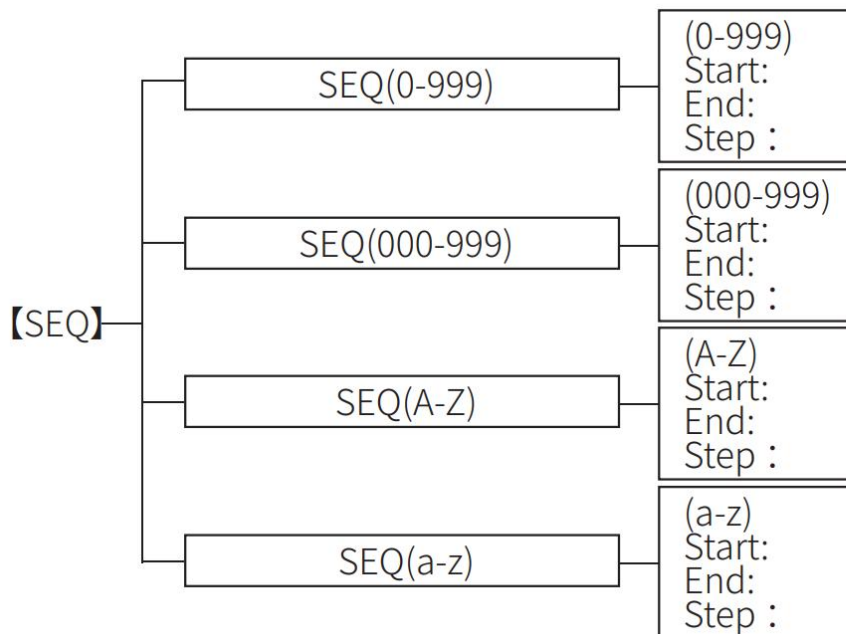
✓Set character and line spacing



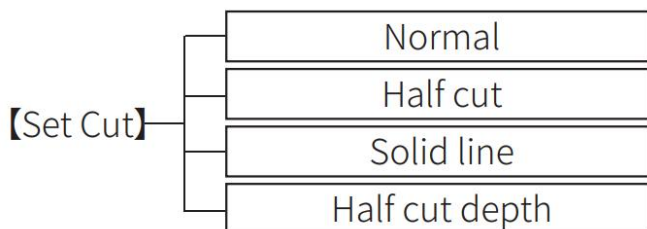
✓Set print density



✓Set the alignment of segment content

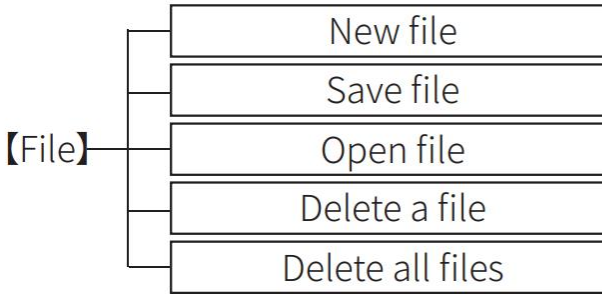


✓Set sequence number,can set letter and number of sequence numbers



Normal	WELCOME	USE	SUPVAN	PRINTER
Half cut	WELCOME	USE	SUPVAN	PRINTER
Solid line	WELCOME	USE	SUPVAN	PRINTER

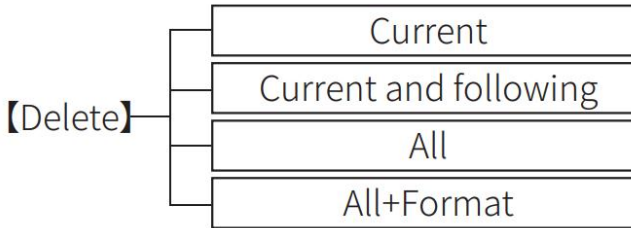
✓Set the cutting method between segments, which can be half cut or draw line and half cut depth adjustment



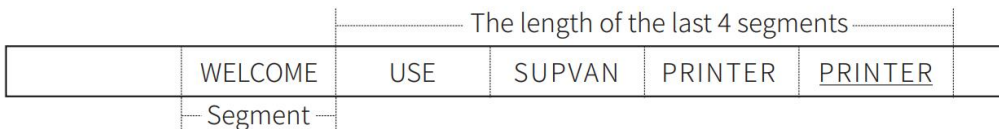
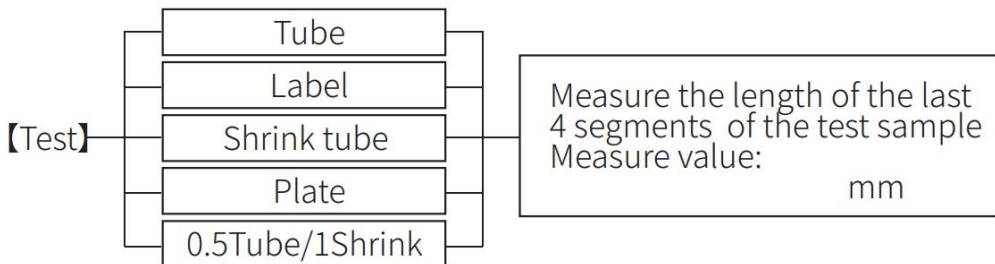
✓Set new, save, open, and delete file



✓Set the reverse rotation of the rubber roller to solve the problem of printing media wrapping around the rubber roller



✓Delete file



✓The Test key solves the inconsistency between the set segment length and the actual printed segment length

【Double Rows】 Set double rows for printing media

【A/a】 Switch upper and lower cases, Long press for the system language selection, The system languages include English, Czech, Slovakia, Polish, German, Spanish, French, Italian, Hungarian, Dutch, Norwegian, Portuguese, Finnish, Swedish, Turkish, Danish

【Ä··】 Variant of the Latin letter

Chapter 4 Connecting TP86E Tube Printer to PC

4.1 PC Connection Specifications for TP86E Tube Printer

Compatible with Windows XP / Windows 7 / Windows 8 / Windows 10 / Windows 11

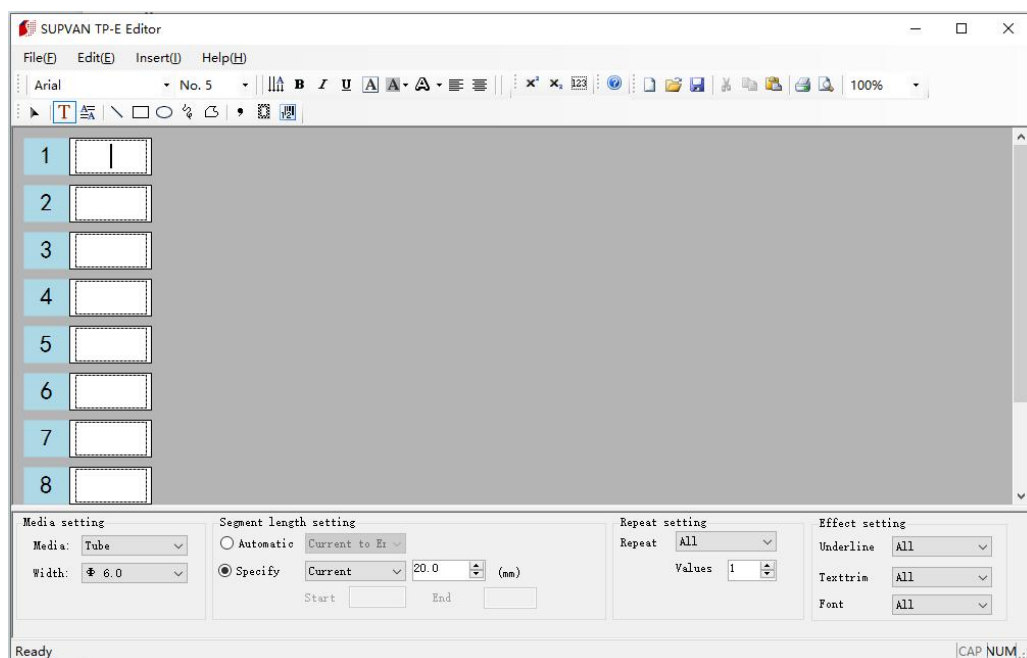
4.2 Installation Procedure for TP86E Tube Printer

1. Connect the TP86E to your PC via USB while the device is powered on.
2. Upon connection, you will be automatically directed to the software download page.
3. Download and install Supvan Editor software.

Note:

If the download page does not open automatically, please proceed to our website to initiate the download.

www.supvan.com.cn-English-Service and Support-Download-TP-E-Editor



Batch printing achieved through importing EXCEL to software

Chapter 5 Others

5.1 Functions of Key Combination

Key Combination	Function Descriptions
【FN】 + 【Stop】 + 【P】	Set the initial depth for half and full cutting of printing materials (tube/label/shrink tube/plate)
【FN】 + 【Stop】 + 【A】	Repeat priority and sequence priority settings
【FN】 + 【Stop】 + 【D】	Turn on / off low temperature printing mode
【FN】 + 【C】	Copy all characters from current segment (cannot copy sequence no.)
【FN】 + 【V】	Paste all copied characters
【FN】 + 【Print】	Cursor print and copy print
【FN】 + 【M】	Reset to factory setting
【FN】 + 【↑】	Adjust brightness
【FN】 + 【↓】	Adjust contrast
【FN】 + 【←】	Beginning of the text: move the cursor to the front of the first segment of the current text
【FN】 + 【→】	End of the text: move the cursor to the end of the last segment of the current text

5.2 Specification of SUPVAN Consumables

Type	Name	Model
Ribbon	Ribbon cassette (Black) (100m/box)	TP-R100EB
	Ribbon cassette (Red) (80m/box)	TP-R80ER
	Ribbon cassette (White) (80m/box)	TP-R80EW
Label	Label cassette tape (White 12mm) (16m/box)	TP-L12EW
	Label cassette tape (Yellow 12mm) (16m/box)	TP-L12EY
	Label cassette tape (Silver 12mm) (16m/box)	TP-L12ES
	Label cassette tape (White 9mm) (16m/box)	TP-L09EW
	Label cassette tape (Yellow 9mm) (16m/box)	TP-L09EY
	Label cassette tape (Silver 9mm) (16m/box)	TP-L09ES

	Label cassette tape (White 6mm) (16m/box)	TP-L06EW
	Label cassette tape (Yellow 6mm) (16m/box)	TP-L06EY
	Label cassette tape (Silver 6mm) (16m/box)	TP-L06ES
Cutters	Cutters	TP-HC12E

5.3 How to Operate the Tube Printer Correctly

1. It is important to keep the tube clean. In this case, it can protect the print head and keep the inside of your printer clean.
2. Ensure there is no external force on tube to guarantee a smooth feeding process.
3. Do not dismantle the printer without any authorization. The tube printer is a sophisticated machine. Inexperienced personnel action may damage printer parts and lose the warranty service.
4. After operation, put it into the hard case.

5.4 Troubleshooting

TP86E Tube Printer		
Fault Phenomenon	Fault Cause	Solution
The content is not centered after half-cut	Different media with different segment lengths	Please adjust the position of contents in segment length by Set.
Actual segment length is different from the setting	Different media	Please adjust by the Test function.
Half-cut effect is not good	The half cutter is blunt	Please replace it with a new one.
	Insufficient half cut depth	Adjust half cut depth by Set
Printing is not clear	Tube is too hard There are stains on tube surface	Please clean the tube or replace it with a qualified one.
	Ribbon is curled	Please take it out. Use it after coiling and leveling, or replace it.
	Print head is worn or scratched	Please replace it.
	Media specification does not set correctly.	Please change the media type setting of printer which should be same as the one in actual operation.
	Ambient temperature is too low or high	Please adjust the printing density or change the ambient temperature of printer operation.
Print content is incomplete	Character size is set too large	Please reset a smaller character size.
	Ribbon is out of way	Please take it out and adjust it
	Media specification does not set correctly	Please change the media type setting of machine which should be same as the one in actual operation
	Print head is worn or scratched	Please replace it.
Act without print content	Print head does not connect correctly	Connect the print head correctly

	Print head is damaged	Please replace it.
Label sticks to cutter	Half-cut is too deep	Select a smaller half-cut depth.
	Adhesive on blade	Clean the blade
The ribbon comes out along with the printing material	Print density too high	Lower the density
	Rewind roller not working	Replace the rewind roller or clean the gear corresponding to the rewind roller
Roller is wrapped with label	Rubber is left on label surface	Press [Rev Feed] to take it out
Print media are not feed	External force on tube	Make sure media feed smoothly without any external force intervention
	Roller is not clear	Please clean the roller.
	Foreign body in channel	Clean the channel

5.5 Symbols

Electrical									

Unit													
°	'	''	\$	¥	₹	¢	£	%	@	°C	°F	\$	%
%	@	mil	cm	km	KM	m²	mg	kg	cc	°	○	π	φ
B	m³	ml	mol										

Mathematics														
≈	≡	≠	=	≤	≥	<	>	<	>	::	±	+	-	×
÷	/	∫	∫	∞	∞	∧	∨	Σ	Π	U	∩	∈	∴	∴
⊥	//	∠	∩	∅	≠	∞	√	≅	≅	∴	≡	+	-	<
>	=	~	⊥	∠	log	ln	¼	½	¾					

Number														
i	ii	iii	iv	v	vi	vii	viii	ix	x	I	II	III	IV	V
VI	VII	VIII	IX	X	XI	XII	1.	2.	3.	4.	5.	6.	7.	8.
9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	(1)	(2)	(3)
(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(19)	(20)	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	(→)	(←)	(⇒)
(四)	(五)	(六)	(七)	(八)	(九)	(十)	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱
⑲	⑳	❶	❷	❸	❹	❺	❻	❼	❽	❾	❿			

Bracket																	
()	⌈	⌋	{	}	⌊	⌋	()	⌈	⌋	【	】	⌈	⌋	《	》
≡	≅	<	>	⌈	⌋	⌈	⌋	⌈	⌋	⌈	⌋	⌈	⌋	()	{	}
()	‘	’	“	”	”	”	、	、								

Punctuation														
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▼	-	、	、	。	。	；	：	？	！		-		-	
	—	#	&	*	※	§	”	№	①	%	-	—	—	---
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\	/	\	am	pm	⊕	⊖	⊗	⊘	⊙					

Arrow															
↑	↓	←	→	↖		↗	↙	↘	↵	↶	↷	↸	↹	↺	↻
↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻
↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻
↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻				

Superscript														
..	©	a	®	°	²	³	¹	º	·	/	”	`	TEL	™
“	”	°	±	+	-	⁴	⁵	⁶	⁷	⁸	⁹	ª	ᵇ	ᶜ
e	d	f	g	h	i	j	k	l	m	n	o	p	q	r
s	t	u	v	w	x	y	z	α	β	γ				

Subscript														
·	±	+	-	°	¹	²	³	⁴	⁵	⁶	⁷	⁸	⁹	ₐ
b	c	e	d	f	g	h	i	j	k	l	m	n	o	p
q	r	s	t	u	v	w	x	y	z	α	β	γ		

Pinyin														
ā	á	ǎ	à	ō	ó	ǒ	ò	ē	é	ě	è	ī	í	ǐ
ì	ū	ú	ǔ	ù	ǖ	ǘ	ǚ	ǜ	ü	ê	ɑ	ín	ń	Ñ
ñ	g													

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

Latin														
A	B	Г	Δ	E	Z	H	Θ	I	K	Λ	M	N	Ξ	O
Π	Ρ	Σ	Τ	Υ	Φ	Χ	Ψ	Ω	α	β	γ	δ	ε	ζ
η	θ	ι	κ	λ	μ	ν	ξ	ο	π	ρ	σ	τ	υ	φ
χ	ψ	ω												

Tabulate														
Г	Т	Г	┆	┆	┆	┆	┆	┆	Г	Т	Г	┆	┆	┆
┆	┆	┆	┆	┆	┆	┆	┆	┆	┆	┆	┆	┆	┆	┆
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┆	┆	┆	┆	┆	┆	┆	┆	┆	┆	┆	┆	┆	┆	┆

Hiragana																
あ	い	う	え	お	か	き	く	け	こ	さ	し	す	せ	そ	た	ち
つ	て	と	な	に	ぬ	ね	の	は	ひ	ふ	へ	ほ	ま	み	む	め
も	や	ゆ	よ	ら	り	る	れ	ろ	わ	を	ん	が	ぎ	ぐ	げ	
ざ	じ	ず	ず	ぞ	だ	ぢ	づ	で	ど	ば	び	ぶ	べ	ぼ	び	
ぶ	べ	ぼ	ぱ	ぴ	ぷ	ぺ	ぽ	ぁ	ぃ	ぅ	ぇ	ぉ	ゃ	ゅ	ょ	っ
わ	ゐ	ゑ														

Katakana																	
ア	イ	ウ	エ	オ	カ	キ	ク	ケ	コ	サ	シ	ス	セ	ソ	タ	チ	ツ
テ	ト	ナ	ニ	ヌ	ネ	ノ	ハ	ヒ	フ	ヘ	ホ	マ	ミ	ム	メ	モ	ヤ
ユ	ヨ	ラ	リ	ル	レ	ロ	ワ	ヲ	ン	ガ	ギ	グ	ゲ	ゴ	ザ	ジ	ズ
ゼ	ゾ	ダ	ヂ	ヅ	デ	ド	バ	ビ	ブ	ベ	ボ	ァ	ィ	ゥ	ェ	ォ	ャ
ュ	ョ	ッ	ヴ	ヰ	ヱ	ヵ	ヶ										