KP-200 Plus

Stand-alone Keyboard Display Unit

USER'S MANUAL

Contents

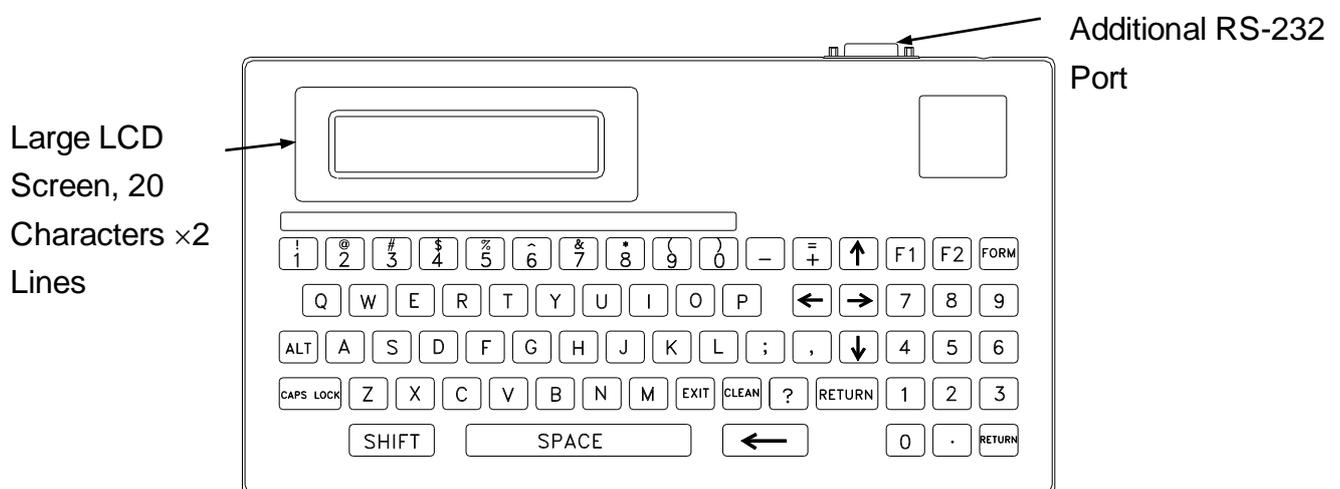# 1. Outline of the KP-200 Plus

Are you worried about printing bar codes somewhere taking the bar code printer and laptop or desktop computer with you? Now there is a solution for you! It's KP-200 Plus series stand-alone keyboard.

KP-200 Plus is a portable terminal input device which connects to the RS-232 port of the bar code printer without additional power supply. It also provides another RS-232 port for bar code scanners or other input devices.

Users can design their own label forms with the BASIC high level language and download the forms into the printer's memory. As you go anywhere just taking the KP-200 Plus and the bar code printer, you will accomplish your jobs easily.

Large LCD Screen, 20 Characters ×2 Lines

Additional RS-232 Port

2. KP-200 Plus Features

- Portable terminal input device without additional power supply
- 68 large keys layout
- Big LCD screen (20 Characters x 2 lines)
- Additional RS-232 port for other input devices ex: bar code scanner
- List the label forms stored in printer memory
- Select forms and print the label
- Input data to print the labels

3. Specifications

Keyboard model	KP-200 Plus
Keyboard	68 keys, large keypad layout
LCD	20 characters x 2 lines
Memory	N/A
Serial interface	COM1: 9 pins, baud rate 9600 bps, male Dsub with cable COM2: 9 pins, baud rate 4800 bps, female Dsub
Power	Input: DC 5V, 250mA
Physical dimension	261 mm (W) x 31 mm (H) x 142 mm (D) 10.2" (W) x 1.2" (H) x 5.6" (D)
Weight	0.6 kg (1.32 lbs)
Environment condition	Operation: 5 ~ 40°C, 20 ~ 80% non-condensing
	Storage: -20 ~ 60°C, 10~ 90% non-condensing

4. Installation

(1) Download the well-designed label forms or programs into printer memory.

(2) Turn off the printer power.

(3) Connect the cable of the KP-200 Plus to the RS-232 port of the printer

(4) Turn on the printer power.

5. Operation

When turn on the printer power, the messages display on the LCD screen is as following:

```
CHECKING PRINTERS
WAITING……
```

```
KP-200 Plus              Vx.xx

```

KP-200 Plus performs self diagnosis and displays the message as follows:

```
"FORM" = SELECT LABELS

```

Press the FORM key to select label form.

```
XXXXXXXX (File name)
↑↓ TO MOVE LIST
```

Note:

If no file is downloaded into printer memory, LCD will display as below, please to download the file to printer first.

```
NO LABEL EXISTING!
PRESS EXIT
```

Press ↑↓ arrow keys to list stored label forms. Or press F1 key to input the file name.

```
INPUT THE FILE NAME:
▌
```

Then, press ENTER key to execute the selected label form.
Follow the prompts which are shown on the LCD screen to print the labels.

Note:

Label forms stored on the printer should be in the 8.3 (xxxxxxxx.BAS) filename formats.
If input the wrong file name, the LCD will show as below, please must input the exact file name.

```
FORMAT NOT FOUND OR
NO PROMPT RESPONSE.
```

6. Function Keys for KP-200 Plus

There are 68 keys on KP-200 Plus. Most of the keys are the same as normal keyboard of desktop computer. The followings are the descriptions of the special function keys:

FORM key	List the label forms downloaded in the printer memory
CLEAR key	Clear characters of the line on the LCD screen where cursor locates.
ALT key	Hold down "ALT" and press the 0~9 keys to get special characters.
F1 key	Search the file and enter the setup menu. (Please refer section 5 & section 7)
F2 key	The one function key is reserved.

7. Power-On Utilities

There are six power-on utilities to set up and test the keyboard. These utilities are activated by pressing the F1 key and turning on the printer power simultaneously. The utilities are listed below:

1. Self test (This function is used for factory.)
2. Auto detect
3. Model change (This function is reserved.)
4. COM1 setup
5. COM2 setup
6. Key sound

Press F1 key and then turn on the printer power. The keyboard will enter the setup menu.
Press ↑ ↓ arrow keys to select the utility.
Press ENTER key to enter or set the utility.
Press EXIT key to cancel the setting and return to the previous menu.

Self test

After enter the setup menu, the first item is self test utility as below:

```
SETUP MENU:
SELFTEST
```

Press the ENTER key to enter this utility, LCD screen will auto display some checking patterns. The check pattern is used to check the performance of LCD screen.

```
KP200P                SELFTEST
      TEST LCD NOW
```

When the LCD screen test is completed, please press EXIT key to enter the keypad test.

```
KP200P                SELFTEST
      TEST KEYPAD NOW
```

There are 68 keys on KP-200 Plus. You should to press all of the keys to

complete this test, if you miss the key that you did not press, the keyboard will show you on the LCD screen as below:

```
┌─────────────────────────────┐
│  MISS PRESS:   < x >        │
│          TEST KEYPAD NOW    │
│                             │
│                             │
└─────────────────────────────┘
```

When the keypad test is completed, please press the EXIT to next test.
The next test need the test cable if you do not have it, please double press the EXIT to leave this self test utility.

Auto detect

This utility is used to set ON or OFF for auto detect.
If setting is ON the keyboard will auto detect the printer using TSPL or EPL. This utility default is ON.

After enter the setup menu, please use ↓ key to select this utility.

```
┌─────────────────────────────┐
│  SETUP MENU:                │
│  AUTO DETECT                │
│                             │
│                             │
└─────────────────────────────┘
```

Press ENTER key to enter this utility. And use ↑ ↓ keys to select ON or OFF.
Press ENTER key to set the setting. Press EXIT key to return to the previous menu.

COM1 setup

This utility is used to set the COM1 settings. (BAUD RATE/ PARITY/ DATA BITS/ STOP BIT) Please refer to section 8 for default setting.

```
┌─────────────────────────────┐
│  SETUP MENU:                │
│  COM1 SETUP                 │
│                             │
│                             │
└─────────────────────────────┘
```

Baud rate: 2400/ 4800/ 9600/ 19200/ 38400/ 57600

Parity: None/ Even/ Odd

Data bits: 7/ 8/ 9

Stop bit: 1/ 2

COM2 setup

This utility is used to set the COM1 settings. (BAUD RATE/ PARITY/ DATA BITS/ STOP BIT) Please refer to section 8 for default setting.

```
SETUP MENU:
COM1 SETUP
```

Baud rate: 2400/ 4800/ 9600/ 19200/ 38400/ 57600

Parity: None/ Even/ Odd

Data bits: 7/ 8/ 9

Stop bit: 1/ 2

Key sound

This utility is used to set the ON or OFF for keypad sound.

```
SETUP MENU:
KEY SOUND
```

8. RS-232 Interface and Communication Parameters

(1) The keyboard COM1 port should be connected to the bar code printer. Keyboard power is drawn from printer serial port.

The communication parameters of the keyboard COM1 port is set as following:

Baud Rate   : 9600 bps

Parity   : None

Data Bits   : 8

Stop Bit   : 1

(2) The keyboard COM2 port can be connected to the bar code scanner. The communication parameters are listed as below.

Baud Rate   : 4800 bps

Parity   : None

Data Bits   : 8

Stop Bit   : 1

(3) Keyboard COM1 and COM2 pin assignment

KEYBOARD COM1		KEYBOARD COM2	
Pin	**Configuration**	**Pin**	**Configuration**
1	Power input 5 volts, 250mA	**1**	Power input 5 volts, 250mA
2	RxD	**2**	TxD
3	TxD	**3**	RxD
4	Not used	**4**	Not used
5	Ground	**5**	Ground
6	Not used	**6**	Not used
7	Not used	**7**	Not used
8	Not used	**8**	Not used
9	Connect with Pin1 internally	**9**	Not used (Short JP4: Connect with Pin1 internally)

Note: (1) Be sure to connect well the scanner and keyboard before turn on the printer power

(2) Please disable the CTS/RTS and Xon/Xoff handshaking of the scanner.

(3) The postfix 0Dh and 0Ah should be set in scanner.

9. Country Code and Keyboard Layout

Country Code	Keyboard Layout									
001	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
002	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	É	µ	£	¢					½	¼
003	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	Ñ	ñ							½	¼
031	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	Ä	ä	£	ë	µ	Ö	ö	Ü	½	¼
032	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	é	è	£	Ç	µ	à	ù	â	ê	í
033	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	à	é	£	è	µ	ù	Ç			
034	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	a̲	o̲	Ñ	Ç	ç	ñ				
036	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	ä	ß	é	ú	ó	Ü	ü	Ö	ö	
038	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	ä	ß	é	ú	ó	Ü	ü	Ö	ö	
039	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	à	ù	£	é	è	ò	Ç			
041	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	à	ä	£	¢	è	é	ü	Ö	Ç	
042	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	ä	ß	é	ú	ó	Ü	ü	Ö	ö	
044	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
			£							
045	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	Å	å	£	Æ	æ	ø	Ø		½	¼
046	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	Å	å	£	Ä	ä	Ö	ö		½	¼
047	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	Å	å	£	Æ	æ	ø	Ø		½	¼

048	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	ä	ß	é	ú	ó	Ü	ü	Ö	ö	
049	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	Ä	ä	Ü	ü	Ö	ö	ß	µ		
055	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	a̲	o̲	£	Ç	ç					
061	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
351	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	a̲	o̲	£	Ç	ç					
358	ALT+1	ALT+2	ALT+3	ALT+4	ALT+5	ALT+6	ALT+7	ALT+8	ALT+9	ALT+0
	Å	å	£	Ä	ä	Ö	ö		½	¼