

# MKB-50

# Programming Keyboard

User's Manual



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## Introduction

Thank you for purchasing the programmable POS keyboard. PKB-50 POS Keyboard with MSR, a compact design, offers maximum space efficiency in retail environments with limited counter space. It incorporates a built-in programming magnetic stripe card reader and 38 configurable keys with relegendable key caps to reduce or eliminate repetitive data input and keystrokes. It also supports multi-level configuration on each key. The MSR swipes with an LED and beeper to indicate a successful swipe.

## Specification

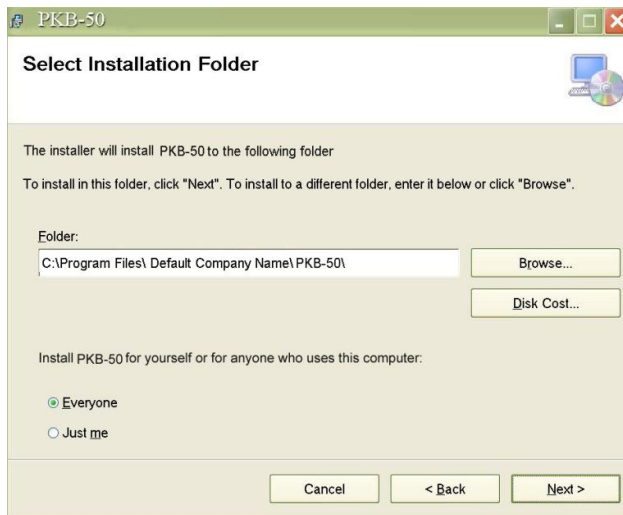
Keyboard Specification		
Key Number	50 keys with 38 relegendable keys	
Key Switch Mechanism	Membrane-type Key Switch with 10 million life cycle time	
Total Travel Distance /	4 ± 0.4mm / 2 ± 0.6mm	
Key Force (Peak Load )	60 ± 20cN	
Interface / Power	USB / +5VDC ± 10% / < 100mA	
Cable Storage	USB cable stored on the back	
Programmable Features		
Programmable Keys	50 keys can be programmable including 38 relegendable keys,	
Multi-Level Programming	Yes, support max 5 levels	
Time Delay Support	Provide a variable time delay, 0.5 sec per interval	
Software Compatibility	Support USB programming in Window ME/ 9X/2K/ XP/ 7, DOS and Linux	
Memory	All programmed data are stored in EEPROM, without battery	
Magnetic Stripe Card Reader Specification		
Card Standard	Comply with ISO 7812, IBM standards, AAMVA, JIS-2	
Programmable Support	Yes, programmable MSR setting for Header, Tailor, Separator, Suffix and	
ISO Card Track	Track 1	210BPI with max 76 characters
	Track 2	210BPI with max 107 characters or 75BPI with max 37 characters
	Track 3	210BPI with max 107 characters
LEDs Indicator	Power, MSR and buzzer	
Swipe Speed / Head Life-Cycle	10 ~ 180 cm/sec. / 500, 000 swipes	
Others		
Electronics Locks	5 section of electronic locks for different level users	
Environment	Operating	0° C ~ 50° C (32° F ~ 122° F) , 10% ~ 90% (no condensation)
	Storage	-20° C ~ 55° C (-4° F ~ 131° F) , 10% ~ 90% (no condensation)
Physical	Dimension	220 (L) x 151 (D) x 40 (H) mm, including MSR / 0.72 kg (NW)
	Box / Weight	330 (L) x 169 (D) x 50 (H) mm/ 1.0 kg (GW)
Accessories	Keycap Puller, 1x & 2x Transparent Caps	

## Chapter 1. Programming Tool Installation

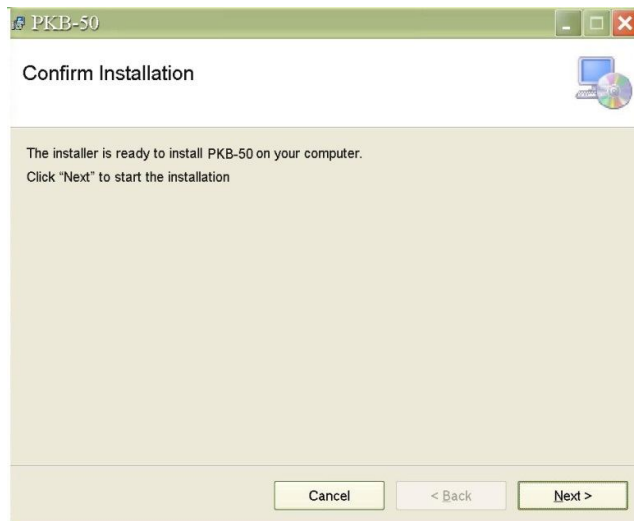
Once download the software, PKB-50\_V1.x.msi, please double click it to start installing the programming tool. It will pop up welcome wizard and click “Next” to proceed.



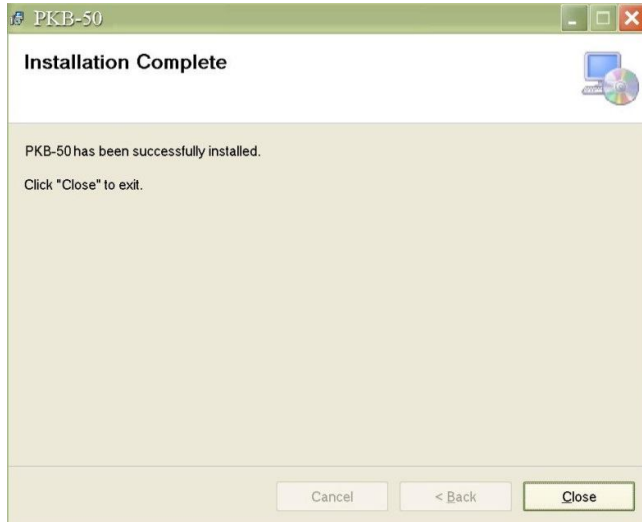
Click “Next” to accept the default installation folder.



And click “Next” again to start the installation.



Click "Close" to complete the installation.



## Chapter 2. Programming Software Introduction



1. *This programming tool works only under USB interface of PKB-50 POS keyboard. Please make sure if your USB jack is well connected to PC's USB port, please refer (Figure 1.0.)*
2. *Please disable power saving in your system while using programming tool. Or close programming tool if you will leave for a while.*

### 2.1 The Main Interface of Programming Software

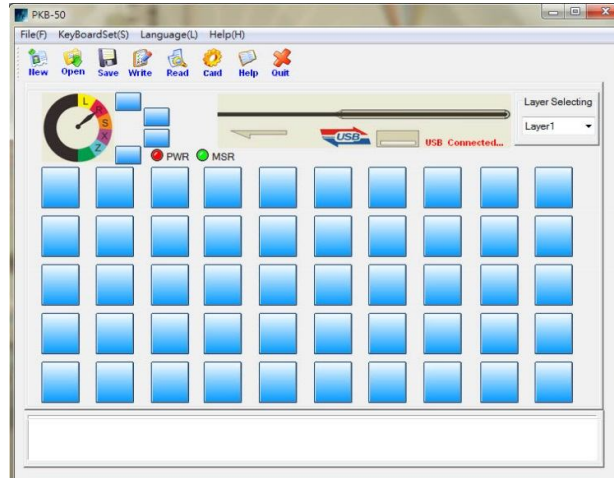


Figure 2.1

#### 2.1.1 Toolbar



Figure 2.1.1

- New** : Create a new programming table
- Open** : Open the saved programming table document. (dat document format)
- Save** : Save the programming table, the format is dat
- Read** : Reade the programming table from the keyboard
- Write** : Write the programming able to the keyboard *(Note! Before reading the key value from keyboard, please do not press this button.)*
- Card** : Set some parameter about the magnetic stripe card reader
- Help** : Open the user manual
- Exit** : Exit the software

### 2.1.2 4 Sections of Electronically lock key and Layer Selection



Figure 2.1.2

- ❶ It indicates 4 section of the electronically lock key, it can be used for layer key as well as ordinary key, *Figure 2.1.2*
- ❷ The figure of electronically lock is to indicate the layer, R (Layer 1), S (Layer 2), X (Layer 3), Z (Layer 4)
- ❸ It is a layer select drop-down menu. Selected Layer1 indicates the Programming table is in layer1. If selecting Layer2, the programming table is in Layer 2.

### 2.1.3 Programming Key and Text Box

The blue keys are programming keys. After this key, "0" key for example, is programmed as "a", the text box will show the key value when your mouse cursor move on this key, please see *Figure 2.1.3*

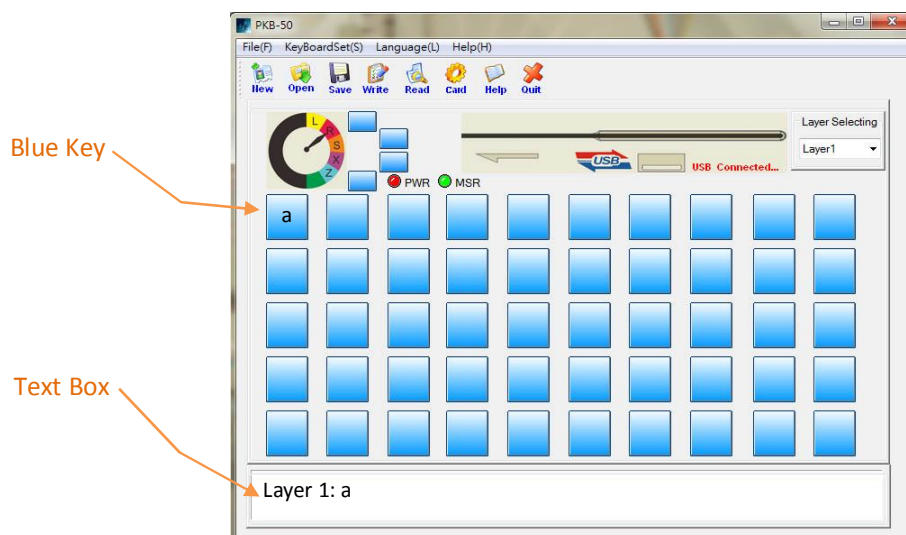
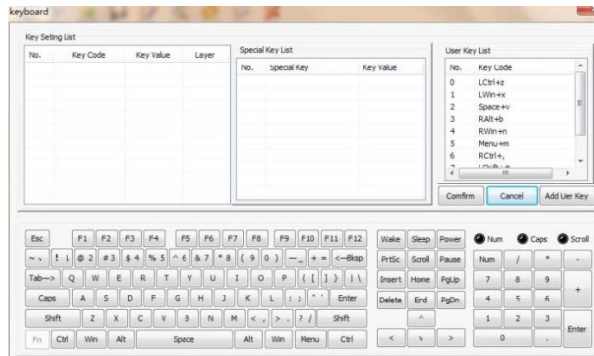


Figure 2.1.3

## 2.2 Virtual Keyboard Interface

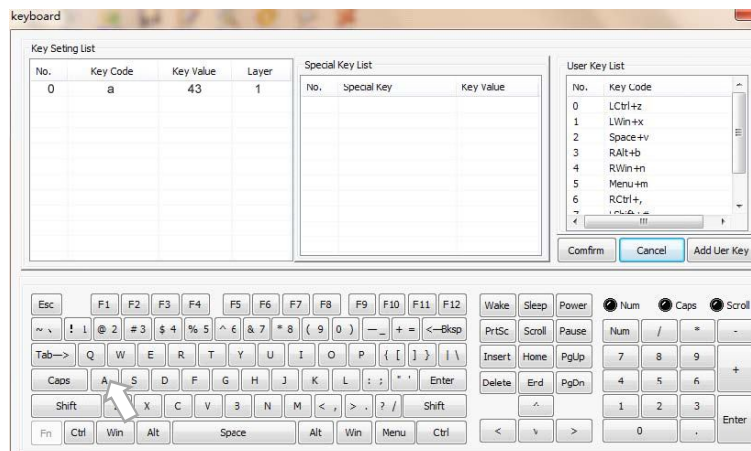
When you click the one of the blue keys in main interface (Figure 2.1.3), it will pop up the virtual keyboard interface shown as (Figure 2.2.1).

Figure 2.2.1



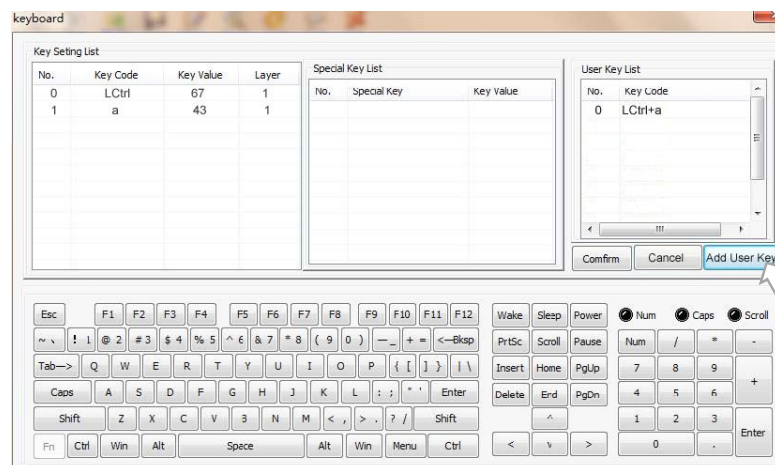
In the virtual keyboard interface, you can define any key value when clicking the virtual key in the virtual keyboard. For example, you click “A” in the virtual keyboard, the key Setting List will be shown as (Figure 2.2.2 ).

Figure 2.2.2



If this key setting is often to be used, you can click **[Add User Key]**, the Key Code “LCtrl+a” will be shown in the field of the User Key List, Figure 2.2.3

Figure 2.2.3



For **[Special Key]** function, this field is not available for users.



## Chapter 3. Using Programming Software

### 3.1 Programming F1 key as " a "

**Step 1.** Before programming any key, please read the default key value from your PKB-50 keyboard first by pressing **[Read]** button. It will pop up the dialogue that data is transferring, see *Figure 3.1.1*

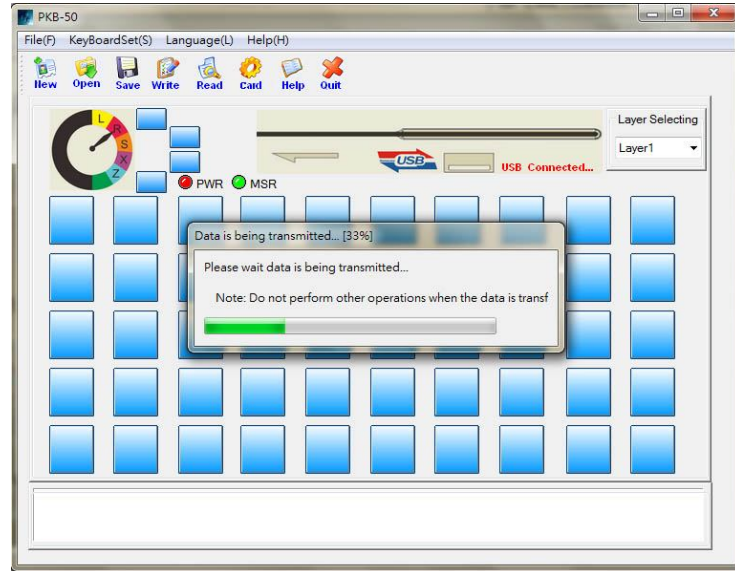


Figure 3.1.1

After finishing the reading (please save this default key value as default in other folder), the default of all key value will be shown on each blue key, please see *Figure 3.1.2*

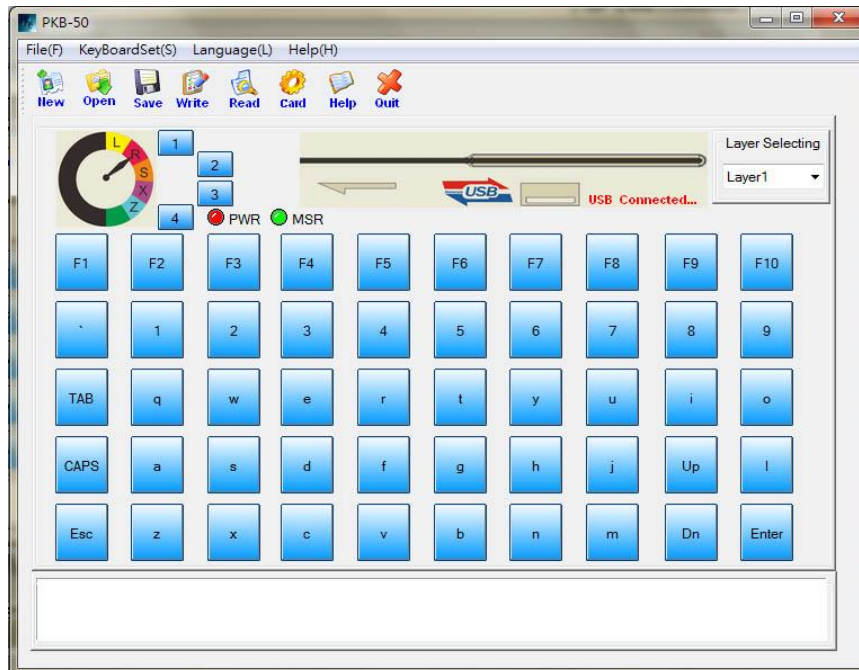


Figure 3.1.2

**Step 2.** Select layer you want to program, please select “Layer 1” for example and click F1 on blue key. It will pop up the virtual keyboard interface, *Figure 3.1.3*. In key Setting List, the Key Code still show F1.

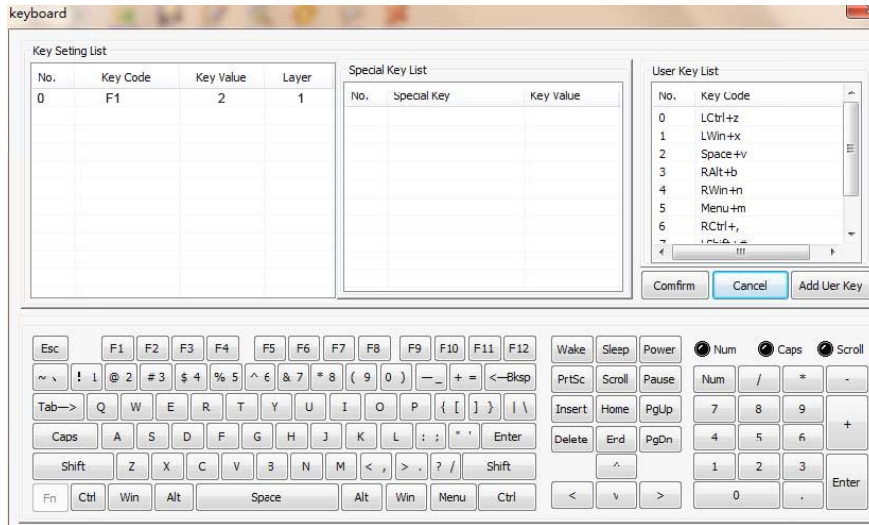


Figure 3.1.3

**Step 3.** Move your mouse cursor on F1 of Key Code field and right-click your mouse. It will show drop-down menu as *Figure 3.1.4* and select “Delete”.

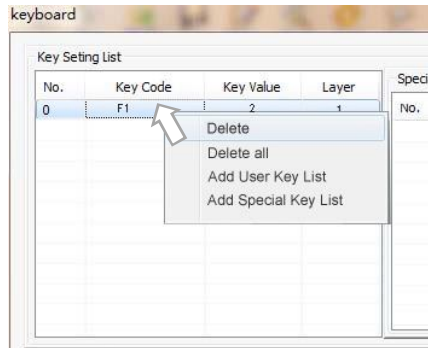


Figure 3.1.4

**Step 4.** Click “a” in the virtual keyboard and click the [Confirm] button to finish the operation.

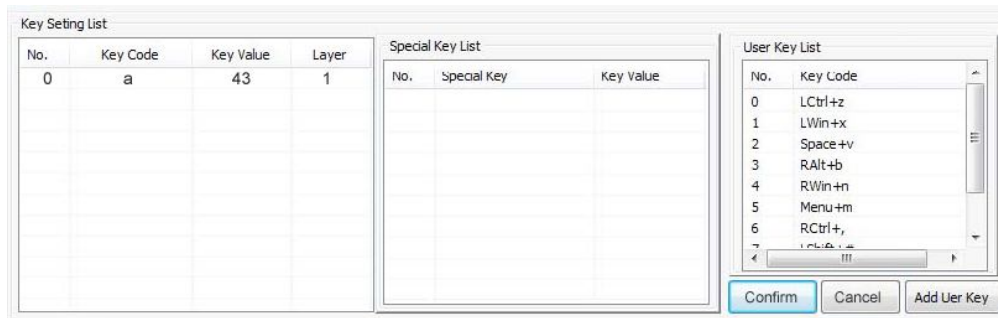


Figure 3.1.5

**Step 5.** Return to main interface, please click [ **Write** ] to send the key value to keyboard. It will inform you : keyboard data is successfully written!!, see *Figure 3.1.6* and click “OK”

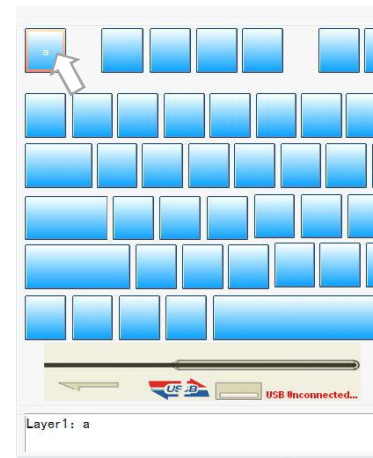


*Figure 3.1.6*

### **How to check if the “F1” key is programmed as “a”?**

-You can move your cursor on the programmed key and the text box will be shown “ Layer 1: a ” in the main interface, please refer to (*Figure 3.1.7*)

- Or you can use MS Notepad and press “F1” key, the screen will show “a” in edit area.



*Figure 3.1.7*

## **3.2 Set F2 key as Your Company Slogan**

Each programming key can support up to 255 characters. You can define F2 key as company slogan “Digimore Your Business !”, for example.

**Step 1.** Select Layer1 and Click blue key, same position of F2 key on PKB-50 POS keyboard. The screen will pop up the virtual keyboard interface.

**Step 2.** Click “LShift” and “d”. You will see the key code will be capital “ D ” not “ d ”, please refer to *Figure 3.2.1*

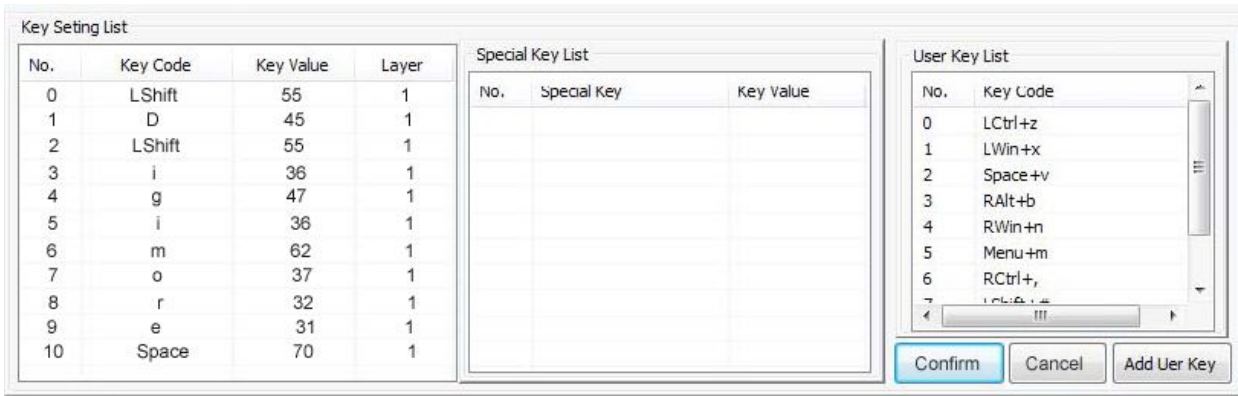


Figure 3.2.1

**Step 3.** Then click “LShif” key in the virtual keyboard again. Then click “ i ” key. You will see the “ i ” is not capital letter. Hereafter is the key Setting List for programming F1 key as “ Digimore Your Business!”

Key Setting List				Key Setting List			
No.	Key Code	Key Value	Layer	No.	Key Code	Key Value	Layer
0	LShift	55	1	15	u	35	1
1	D	45	1	16	r	32	1
2	LShfit	55	1	17	Space	70	1
3	i	36	1	18	LShift	55	1
4	g	47	1	19	B	60	1
5	i	36	1	20	LShift	55	1
6	m	62	1	21	u	35	1
7	o	37	1	22	s	44	1
8	r	32	1	23	i	36	1
9	e	31	1	24	n	61	1
10	Space	70	1	25	e	31	1
11	LShift	55	1	26	s	44	1
12	Y	34	1	27	s	44	1
13	LShift	55	1	28	LShift	55	1
14	o	37	1	29	!	15	1

**Step 4.** After input all key codes, click the **[Confirm]** to finish the operation.

**Step 5.** Return to main interface, please click **[ Write ]** to send the key value to keyboard.

**Step 6.** You can save the programmed key value in dat. File. Just click **[Save]** on toolbar of main interface.

### 3.3 Layer Switch Setting

In the main interface, you can manage layer setting by right-click your mouse, please refer to *Figure 3.3.1*

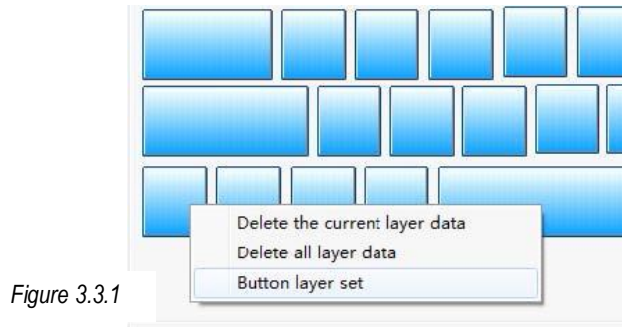


Figure 3.3.1

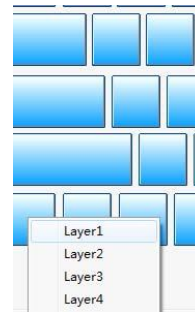


Figure 3.3.2

When you right-click your mouse on programmed key, you can see the menu shown, Delete the current layer data, Delete all layer data and Button layer set (please refer to *Figure 3.3.2*).

### 3.4 Setting Parameter of Magnetic Stripe Card Reader

Click the **[Card]** button of Toolbar into the setting screen of magnetic stripe card reader, see *Figure 3.4.1*.

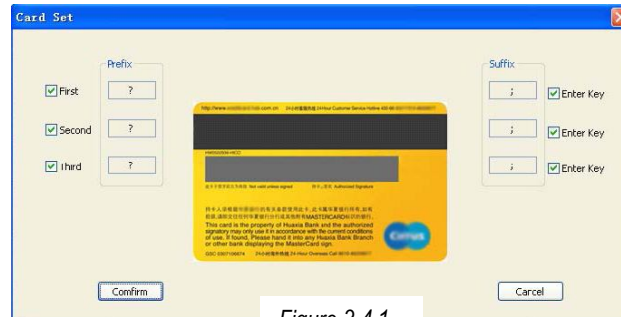


Figure 3.4.1



- ❶ Set Enable Track – Click check box  First, Second or third to enable any of tracks
- ❷ Set Prefix Character -Double click the text box, it will pop up the virtual keyboard interface and select character you need.
- ❸ Set Suffix Character – the procedure is same as set prefix character.

- 4 Enable Enter Key – When click check box of  Enter Key, end of track dat will add the “Enter” key value.

### 3.5 Setting Property of Keyboard

You can set your keystroke with sound or only programmed key with sound by selecting [**KeyboardSet**]/**[Keyboard Setting]** into keyboard setting screen (Figure 3.5.1). In keyboard setting screen, you can select keystroke sounding with either for all key or for specified key.

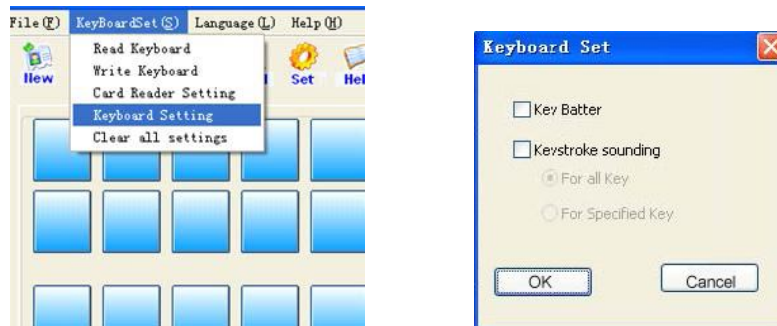


Figure 3.5.1

### 3.6 Save/ Open/ Copy Programmed data as dat. File Format

When all programming and setting are done, you can save the current programming data as a dat document by clicking [**Save**] into your selected folder and enter file name, PKB-50 for example.

You can also open file by clicking [**Open**] and select PKB-50.dat. In the main interface, you can see key value on blue key.

If you want to copy this programming data into other keyboard, just open the file and click [**Write**]. The key value of the new keyboard will be same as your pre-programming keyboard.