

POS Keyboard Setting Tool **Documentation**

Second Edition

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TOSHIBA TEC CORPORATION

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1. General

This is the tool to write data in the POS KEYBOARD (PKBST50, PKBST52) on Windows. Data write is performed by access to the POS-KEYBOARD driver via POSESC32.dll.

Development environment

OS: WindowsXP SP2
Development tool: Microsoft Visual C++ V6.0 SP5
MFC: Use (Common DLL of MFC is used.)
EXE name: SetKBWin.exe

Dependency

- POSESC32.dll
- MKMGR.exe (with PKBST50), USBKBMGR.exe (with PKBST52)
- TOSHIBA TEC's keyboard driver (kbfilter.sys, TECUSB.dll, TECUSB.sys)

Note)

POS Keyboard keeps key code mapping data in Flash ROM by itself.

Therefore, It's not so good that key code (or macro Key) settings are downloaded too many times.

2. Operating Instruction

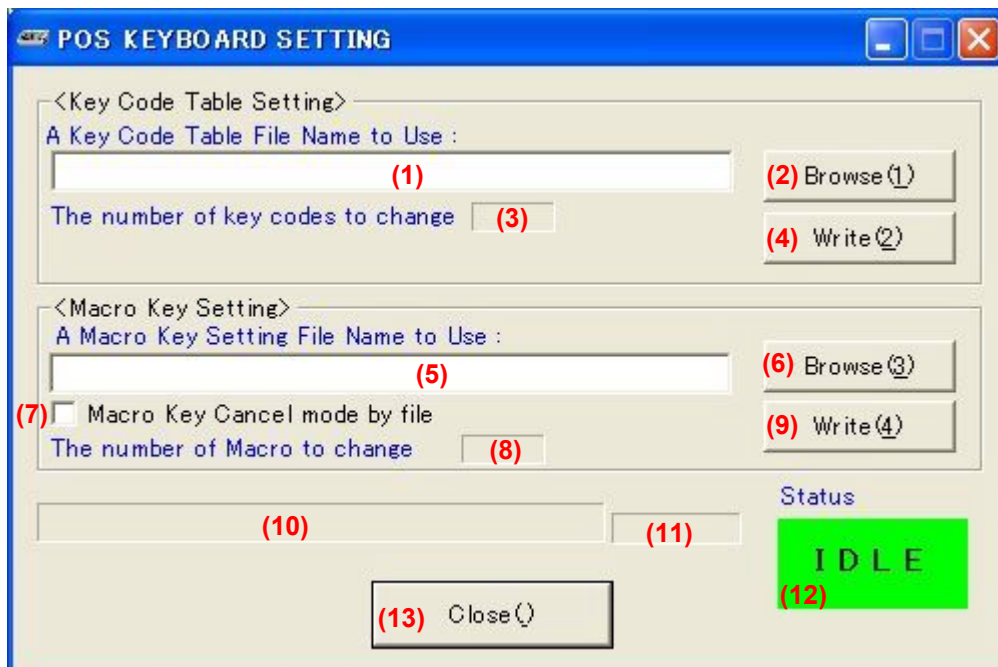
2.1 Starting the POS keyboard setting tool

The POS keyboard setting tool is started by performing one of the following operations on Windows. No start-up arguments exist.

1. On the Explorer, double-click on the applicable exe.
2. On the Explorer, press ENTER key to select the applicable exe.
3. Click on Run of the START menu, type in the file name, and click on the OK button.

2.2 Screen

The following screen appears when the POS keyboard setting tool has been started.



- (1) The area of [Key Code Setting File Name]
- (2) Browse button (Key code setting File Name dialogue)
- (3) The area of [The number of key codes to change]
- (4) Write button (Key code setting)
- (5) The area of [Macro Key Setting File Name]
- (6) Browse button (Macro Key setting File Name dialogue)
- (7) Selection check box (Set or delete the Macro key)
- (8) The area of [The number of Macro key codes to change]
- (9) Write button (Macro Key setting)
- (10) Operation progress bar
- (11) Operation progress counter
- (12) Operating status
- (13) Close button

2.2.1 The area of [Key Code Setting File Name]

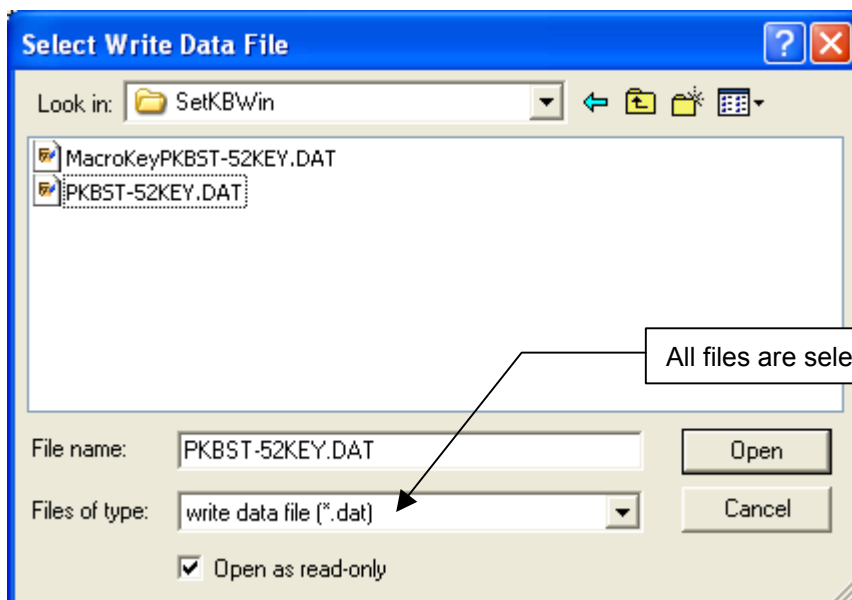
File name can be directly typed in or selected by using the Browse button. When a file name is directly typed in this area and the Enter key is pressed, the presence of files and description file format are checked, and the number of the key codes is shown in the Number of key codes to change area.

When selecting the file from the file reference window displayed by clicking on the Browse button, click on the Open button to close the window. Then, the selected file is shown in this area, the presence of the file and description file format are checked, and the number of key codes appears in the Number of key codes in key code file area.

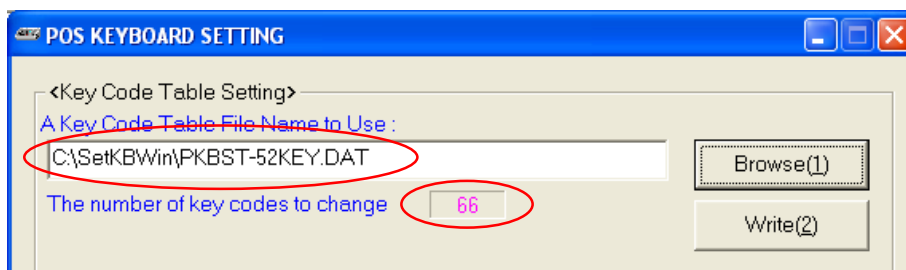
Set a key code file name in full path.

2.2.2 Browse button (Key code setting File Name dialogue)

Click on the Browse button, or press the Enter key on the keyboard while the Browse button is selected. The following Window appears.



Select the applicable file and click on the Open button. The window is closed and the selected file name is displayed in the A Key Code File Name to Use area. When the Open button is clicked, the description file format is checked, and the number of the key codes is shown in the Number of key codes in key code file area. In case of an error in the description, a warning message box appears.



When the Cancel button is clicked, the setting in the A Key Code File Name to Use area will not be changed.

2.2.3 The area of [The number of key codes to change]

Click on the Browse button, select a file from the file reference window, and click the Open button to close the window. Then, the number of key codes of the selected file is shown in this area. The number of key codes is also displayed when the file name is directly typed in and the Enter key is pressed.

2.2.4 Write button (Key code setting)

Click on the Write button to write the contents of the file displayed in the A Key Code File Name to Use area in the POS KEYBOARD via POSESC32.dll. The file format is checked when the write operation starts. In case of an error, a warning message box appears.

The Operating status, Operation progress bar and Number of finished key codes are updated during write operation.

2.2.5 The area of [Macro Key Setting File Name]

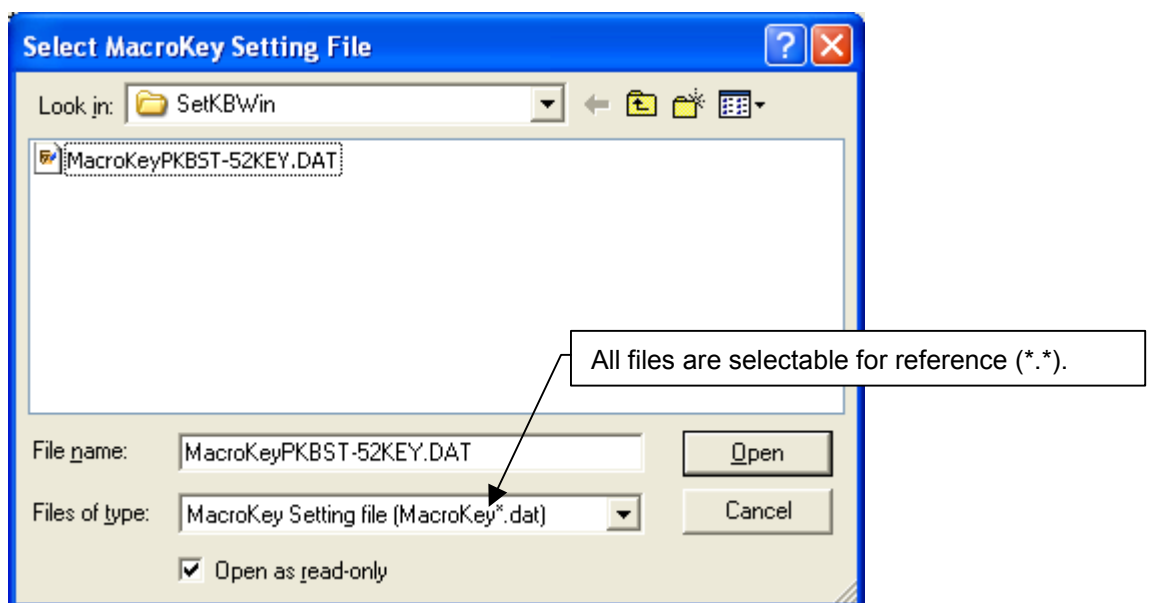
File name can be directly typed in or selected by using the Browse button. When a file name is directly typed in this area and the Enter key is pressed, the presence of files and description file format are checked, and the number of the Macro key is shown in the Number of Macro key to change area.

When selecting the file from the file reference window displayed by clicking on the Browse button, click on the Open button to close the window. Then, the selected file is shown in this area, the presence of the file and description file format are checked, and the number of Macro key appears in the Number of Macro key in key code file area.

Set a Macro key file name in full path.

2.2.6 Browse button (Macro Key setting File Name dialogue)

Click on the Browse button, or press the Enter key on the keyboard while the Browse button is selected. The following Window appears.



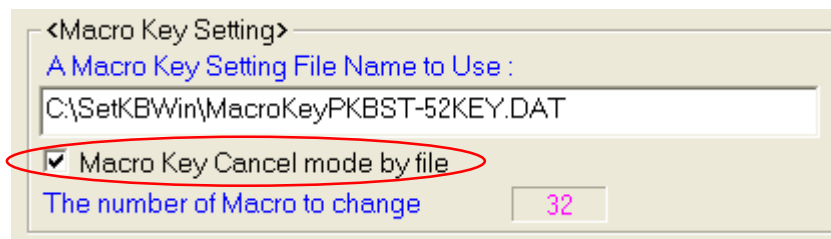
Select the applicable file and click on the Open button. The window is closed and the selected file name is displayed in the A Macro Key Setting File Name to Use area. When the Open button is clicked, the description file format is checked, and the number of the Macro key setting is shown in the Number of Macro key settings area. In case of an error in the description, a warning message box appears.



When the Cancel button is clicked, the setting in the A Macro Key Setting File Name to Use area will not be changed.

2.2.7 Selection check box (Set or delete the Macro key)

If defined Macro Keys have to be cancelled, please check it.



Then, defined Macro Keys are cancelled based on the Macro key setting file when Write button is clicked.

2.2.8 The area of [The number of Macro key to change]

Click on the Browse button, select a file from the file reference window, and click the Open button to close the window. Then, the number of key codes of the selected file is shown in this area. The number of key codes is also displayed when the file name is directly typed in and the Enter key is pressed.

2.2.9 Write button (Macro Key setting)

When 'Macro Key cancel mode by file' are not checked:

Click on the Write button to write the contents of the file displayed in area of the Macro Key Setting File Name area in the POS KEYBOARD via POSESC32.dll. The file format is checked when the write operation starts. In case of an error, a warning message box appears.

The Operating status, Operation progress bar and Number of finished key codes are updated during write operation.

When 'Macro Key cancel mode by file' are checked:

Click on the Write button to delete the contents of the file displayed in area of the Macro Key Setting File Name area in the POS KEYBOARD via POSESC32.dll. The file format is checked when the delete operation starts. In case of an error, a warning message box appears.

The Operating status, Operation progress bar and Number of finished key codes are updated during delete operation.

2.2.10 Operation progress bar

The status of data write operation is shown by the progress bar.

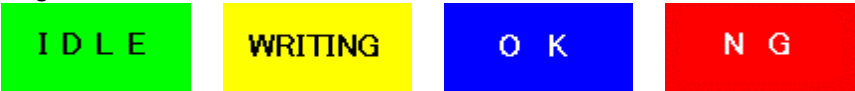
2.2.11 Operation progress counter

The progress of data write operation is shown by number. The format is as follows:

Number of finished key-codes(Macro Keys) / Number of total key-codes(Macro Keys)

2.2.12 Operating status

The current operating status is shown as follows:



- IDLE : Idle state
- WRITING : Writing
- OK : Normally terminated.
- NG : Abnormally terminated.

<About Key code Setting>

Idle

Writing

Normally terminated.

Abnormally terminated.

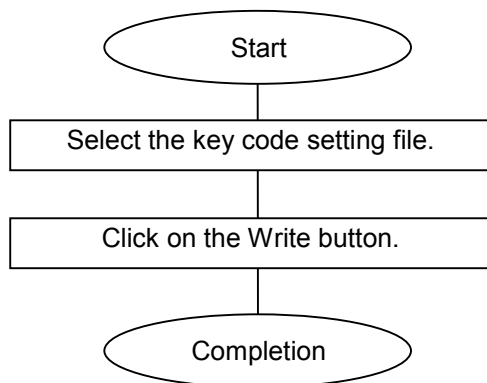
<About Macro Key Setting>

2.2.13 Close button

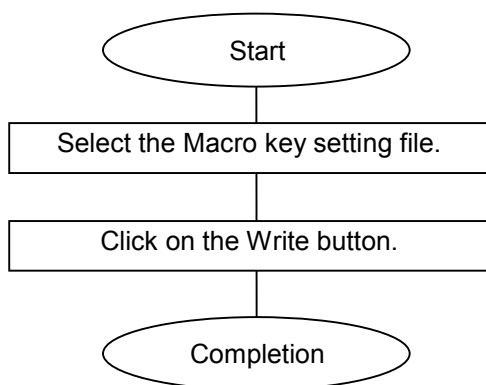
Terminates this program.

3. Write Operation Flow

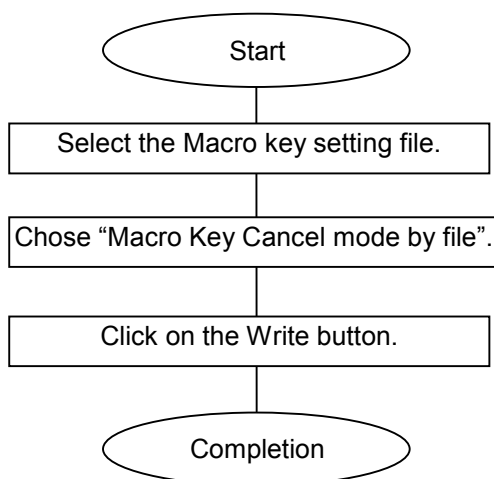
3.1 Set Key code



3.2 Set Macro Key



3.2 Delete Macro Key



4. Setting File Format

4.1 Key code setting File

Example)

```
#####
#      POS 81 K/B CUSTOM KEY ASSIGN                      #
#                               for PKBST50                #
#      101 Key Code SET                                    #
#      Create: September 20, 1995                          #
#      Change :                                           #
#####
#KEY TOP,STATUS,KEY NO # COMMENT                          #
#####
134, 00, 110      # ESC                                    #
118, 01,  2      # !                                      #
102, 00, 31      # a                                      #
 86, 00, 50      # b                                      #
```

Restrictions:

- Up to 80 letters per line
- Within one line, data following the # is a comment.

Setting example:

134, 00, 110

KEY NUMBER 0 to 255 (decimal notation)

STATE 0 to 255 (decimal notation)

KEY POSITION NUMBER 0 to 255 (decimal notation)

STATE (for composite key)

(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)
-----	-----	-----	-----	-----	-----	-----	-----

- (1) SHIFT (LEFT)
- (2) SHIFT (RIGHT)
- (3) ALT (LEFT)
- (4) ALT (RIGHT)
- (5) CONTROL (LEFT)
- (6) CONTROL (RIGHT)
- (7) 0 (fixed)
- (8) 0 (fixed)

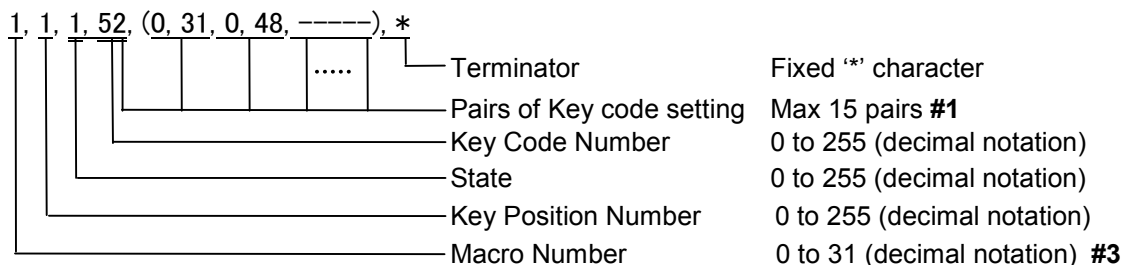
4.2 Macro Key setting File

```
#####
#   PKBST52 K/B Macro KEY ASSIGN                               #
#                               for ST-B10                       #
#   101 Key Code SET                                           #
#   Create: January 15, 2010                                   #
#   Change :                                                    #
#####
1,1,
1,52,0,31,0,48,0,20,0,25,
0,61,1,21,0,19,0,32,0,21,
0,61,1,52,0,31,0,47,1,2,
*                               #Macro Test Max!              #
```

Restrictions:

- Up to 80 letters per line
- Within one line, data following the # is a comment.

Setting example:



STATE (for composite key)

(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)
-----	-----	-----	-----	-----	-----	-----	-----

- (1) SHIFT (LEFT)
- (2) SHIFT (RIGHT)
- (3) ALT (LEFT)
- (4) ALT (RIGHT)
- (5) CONTROL (LEFT)
- (6) CONTROL (RIGHT)
- (7), (8) 0 (fixed)

(Note)

- # 1 : The pair of [State, Key code] are max 15 sets.
- # 2 : If you need 'CR-LF' Character for one macro key setting, please insert the 'CR+LF' after ' , '.
- # 3 : The number of Macro keys are max 32 set.

5. Restrictions for Write Operation

Please be careful about below when writing data.

- Do not input the keys during write operation.
- Do not perform operation with the mouse during write operation.

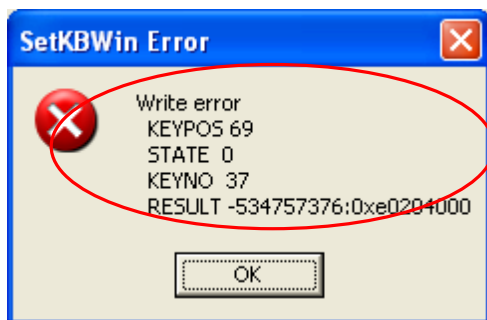
The above operations may cause a write error.

6. Error Warning Message Box

In case of an error, this program notifies the error to the operator through the message box. The following factors generate this error notification message box:

- 1) Selected file error
 - No presence
 - Inaccessible
 - Illegal format description
- 2) Data write error

Example) A message box to notify a data write error



As shown on the left, additional information may be included.

This example shows an error occurred during write operation. The following were being written.

KEYPOSITION

KEYSTATE

KEYNO

RESULT is an error code generated from POSESC32.