

PA-2400

SIP Library Manual

(Version 1.00)

March 1998

Casio Computer Co., Ltd.

Copyright ©1998. All rights reserved.

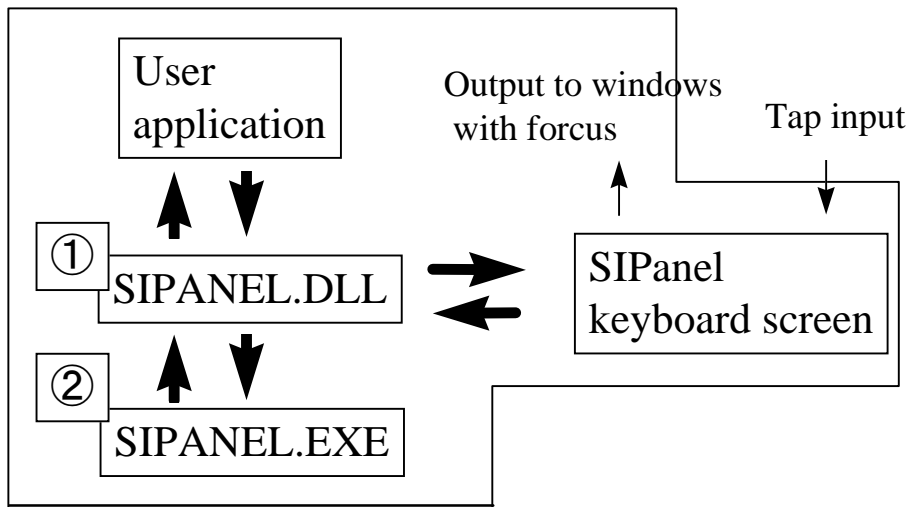
Table of Contents

Chapter	1.	Overview	3
Chapter	2.	Restrictions	4
	2.1	Casio SI Panel and smARTkeyboard	4
Chapter	3.	Functions of SIPANEL.DLL	6
	3.1	List of Functions	6
	3.2	List of Return Values and Parameter Values	6
		SIP_ExecutePanel	7
		SIP_ShowPanel	9
Chapter	4.	Method of Using SIPANEL.EXE	10
	4.1	Overview	10
	4.2	Options of Command Line	10

1. Overview

This manual describes the specifications of the functions for both the SIPanels, which are executed on the Windows CE US Ver2.0 (on Casio PA-2400), and the DLL (Dynamic Link Library) which is called from the user application.

Fig. 1.1 System configuration (Windows CE Ver. 2.0)



Operation of this system requires the following files:

Table 1.1

No	File name	Operation environment	Description
1	sipanel.dll	WinCE US 2.0 (SH3)	Execution management library for starting SIPanel
2	sipanel.exe	WinCE US 2.0 (SH3)	Execution program for starting SIPanel

Use the following files if developing a user application that controls the SIPanel with the execution management library of this system.

Table 1.2

No	File name	Operation environment	Description
1	sipanel.lib sipanel.h	WinCE US Ver2.0 (SH3)	Import library and header file for calling sipanel.dll

2. Restrictions

Operation of SIPanel is subject to the following restrictions.

- Successful operation is not ensured if the ROM-version of SIPanel is also present.
- The SIPanel screen may be hidden behind the display that is associated with an application, such as PowerPoint, if one is used.

2.1 Casio SI Panel and smARTkeyboard

In the PA-2400, there are two different SI Panels (Software Input Panel of keyboard) are pre-installed. The significant differences between the two keyboards are;

Casio's SI panel ;

- Only ten key is displayed.
- The size of the keyboard on screen can be adjusted.

Fig. 2.1 Casio SI Panel

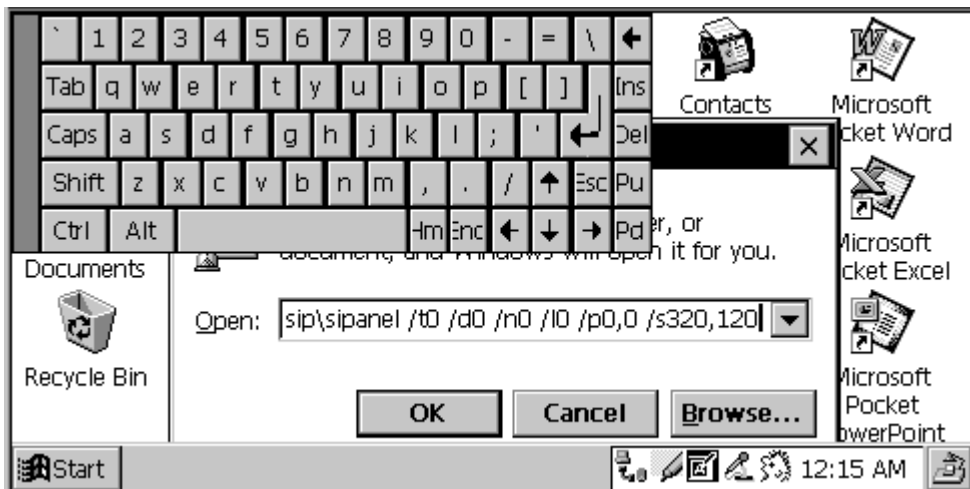


Fig. 2.2 Ten key on Casio SI Panel



SmARTkeyboard ;

- Various key symbols can be displayed.
- The size of the keyboard on screen cannot be adjusted. it has been fixed.

For detail of the smARTkeyboard, you may refer to “PA-2400 Getting Started with the CASSIOPEIA (Hardware Manual)” enclosed in the individual carton box.

Note:

smARTkeyboard is a registered trademark of Advanced Recognition Technologies Inc. in the United States.

3. Functions of SIPANEL.DLL

3.1 List of Functions

Table 3.1

Function	Description	Page
SIP_ExecutePanel	Initiates SIPanel. If it has already been initiated, it will be displayed as specified by the parameters.	7
SIP_ShowPanel	Switches between display/non-display of the SIPanel	9

For the detail of each function, please refer to the following pages.

3.2 List of Return Values and Parameter Values

Table 3.2

Abbreviation	Description
SIP_NO_ERROR	Normal termination of SIPanel
SIP_NOT_EXECUTE	SIPanel is not initiated.
SIP_SHOW	SIPanel is displayed.
SIP_HIDE	Normal termination of SIPanel

SIP_ExecutePanel

< Function >

Initiation of SIPanel

Initiates SIPanel in the non-display mode. If it has already been initiated, it will be displayed as specified by the parameters. If it has already been displayed, it will be set to non-display and all parameters other than /Q will be ignored.

< Format >

int SIP_ExecutePanel (LPCTSTR IpParam)

< Parameter >

IpParam:

Pointer to the parameters string. One specification unit consists of a '/' and an alphabet (not case-sensitive) plus a numeral. To specify multiple units delimit them with a space (order of specification unit does not matter). All parameters other than those listed below will be ignored (invalid).

/Q	Terminates SIPanel. Other parameters are ignored.
/T1	Adds a text area. If keyboard character is touched once it will be temporarily displayed in the text area, and, if the Return key is touched, it will be transferred to a currently active window.
/T0	Does not add a text area. (Initial condition default.)
/D1	Establishes a drag area in the upper section of the screen. This drag area is a range in which a mouse event is detected if the display position of SIPanel is modified.
Note:	
If the drag area extends beyond the display range, dragging is no longer possible.	
/D3	Does not establish a drag area. Dragging is not possible.
/D0 or /D2	Establishes a drag area on the left side of the screen. (Initial condition default.)
/N2	Displays a panel that only contains numeric keys.
/N1	Adds numeric keys to the standard keyboard.
/N0	Does not add numeric keys to the standard keyboard. (Initial condition default.)
/L1	Activates the Caps Lock key.
/L0	Deactivates the Caps Lock key. (Initial condition default.)
/Px, y	Specifies the coordinates of the top left corner of the SIPanel. "x" should be between 0 and 479 of the X-axis coordinate, and "y" should be between 0 and 239 of the Y-axis coordinate. "x" and "y" should be separated by a comma (","). The default values are x=0 and y=0.

/Sw, h Specifies the width and height of SIPanel to be displayed. "w", the width, should be between 1 and 480, and "h", the height, should be between 1 and 240. "w" and "h" should be separated by a comma (","). The default values are w=320 and h=120.

Note:

If values that are too small are specified, tapping on the panel has no effect and, consequently, a key input is not possible.

Unless otherwise specified, the parameters will retain their previous values.

- If SIPanel is initiated without a parameter being specified, the following condition is employed for the defaults:

```
SIP_ExecutePanel (L"/T0 /D0 /N0 /L0 /P0,0 /S320, 120");
```

< Return Value >

SIP_NO_ERROR	Normal termination
SIP_SHOW	Normal initiation, SIPanel is in the display mode.
SIP_HIDE	Normal initiation, SIPanel is in the non-display mode.

SIP_ShowPanel

< Function >

Display/Non-display of SIPanel

Sets SIPanel to the display mode or non-display mode.

< Format >

int SIP_ShowPanel (int iCmdShow)

< Parameter >

iCmdShow SIP_SHOW: Displays SIPanel if it is in the non-display mode.
 SIP_HIDE : Hides SIPanel if it is in the display mode.

< Return Value >

SIP_NOT_FOUND SIPanel is not initiated.
SIP_SHOW SIPanel is being displayed.
SIP_HIDE SIPanel is hidden (not displayed).

4. Method of Using SIPANEL.EXE

4.1 Overview

Initiate SIPANEL.EXE and call SIPANEL.DLL to control the SIPanel.

SIPanel will be initiated in the non-display mode. If it has already been initiated, it will be displayed as specified by the command line options. If it has already been displayed, it will be set to non-display and all parameters other than /Q will be ignored.

4.2 Options of Command Line

Format: sipanel.exe [/Q] [/T|0|1|] [/D|0|1|] [/N|0|1|] [/L|0|1|] [/Px,y] [/Sw,h]

One specification unit consists of a '/' and an alphabet (not case-sensitive) plus a number.

To specify multiple units delimit them by inserting a space after each unit (order of unit specification does not matter). All parameters other than those listed below will be ignored (invalid).

/Q	Terminates SIPanel. Other parameters are ignored.
/T1	Adds a text area. If keyboard character is touched once it will be temporarily displayed in the text area, and, if the Return key is touched, it will be transferred to a currently active window.
/T0	Does not add a text area. (Initial condition default.)
/D1	Establishes a drag area in the upper section of the screen. This drag area is a range in which a mouse event is detected if the display position of SIPanel is modified.
	Note:
	If the drag area extends beyond the display range, dragging is no longer possible.
/D3	Does not establish a drag area. Dragging is not possible.
/D0 or /D2	Establishes a drag area on the left side of the screen. (Initial condition default.)
/N2	Displays a panel that only contains numeric keys.
/N1	Adds numeric keys to the standard keyboard.
/N0	Does not add numeric keys to the standard keyboard. (Initial condition default.)
/L1	Activates the Caps Lock key.
/L0	Deactivates the Caps Lock key. (Initial condition default.)
/Px,y	Specifies the coordinates of the top left corner of the SIPanel. "x" should be between 0 and 479 of the X-axis coordinate, and "y" should be between 0 and 239 of the Y-axis coordinate. "x" and "y" should be separated by a comma (","). The default values are x=0 and y=0.
/Sw,h	Specifies the width and height of SIPanel to be displayed. "w", the width, should be between 1 and 480, and "h", the height, should be between 1 and 240. "w" and "h" should be separated by a comma (","). The default values are w=320 and h=120.

Note:

If values that are too small are specified, tapping the panel has no effect and, consequently, a key input is not possible.

Unless otherwise specified, the parameters will retain their previous values.

- If SIPanel is initiated without a parameter being specified, the following condition is employed for the defaults:

```
sipanel.exe /T0 /D0 /N0 /L0 /P0, 0 /S320, 120
```