# Braille EDGE 40 User Manual

**ENGLISH MANUAL** 

(December, 2011)

When there are any manual updates, the readme files or appendices will be added to the manual CD and website.

# **HIMS International Corporation**

139-9, Gajung-dong, Yuseong-gu Daejeon, Korea 305-350 Tel : 042-864-4460 Fax : 042-864-4462 E-mail : hims@himsintl.com http://www.himsintl.com

# **Safety Precaution**

For your safety from the Braille EDGE 40, please read safety precautions carefully.

- The input voltage of the AC adapter is 100V 240V, and the output is DC 5V / 2A.
- 2. When you use the Braille EDGE 40 with the battery for the first time, the battery status may not be displayed accurately. In order to avoid this, connect the Braille EDGE 40 to the AC adapter for more than four and a half hours to fully charge the battery with turn on or connect to the Braille EDGE 40 to the USB cable for more than ten and a half hours.
- 3. Your Braille EDGE 40 needs to be handled with care. The Braille EDGE 40 is a very delicate machine. You should make sure to handle the unit in a proper manner. Also, the Braille EDGE 40 is very sensitive to dust. Make sure to keep the Braille EDGE 40 away from dusty environments.
- 4. The Braille cells are very sensitive parts. If any of the Braille cells are not working properly due to dust or any other reason, please contact our repair center, or the dealer whom you purchased the Braille EDGE 40 from for support.
- If you let your Braille EDGE 40 remain for a long time at the closed or high temperature places like inside of car, the battery attached to the Braille EDGE 40 may be defected or fired. So please don't keep your Braille EDGE 40 at those places.
- 6. Do not take apart the Braille EDGE 40 by yourself. Do not have anyone else who is not authorized by HIMS take apart the Braille EDGE 40. If an unqualified person disassembles the unit, serious damage may occur to the Braille EDGE 40. If an unauthorized person disassembles the Braille EDGE 40, the unit will be excluded from any free maintenance, and the warranty will become void. If any liquid or external force damages the unit, it may also be excluded from free maintenance, even if the damage occurred during the warranty period.
- 7. If you have any complaints or suggestions, please provide us with your comments on our website. We will improve our product based on your comments and suggestions. Thank you for using the Braille EDGE 40, and we value any comments or suggestions you have for our product.

8. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Operation is subject to the following two conditions.

- 1) This device may not cause harmful interference, and
- 2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment can generate, use and radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# **IMPORTANT NOTE:**

FCC RF Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

# **Notice**

- This user manual and products are protected by copyright law
   Microsoft Windows, and the Windows Logo are registered trademarks or trademarks of Microsoft Corporation United States other countries.

# **Table of contents**

1. Getting Started	. 7
1.1 What is the Braille EDGE 40?	7
1.2 Package	7
1.3 Specification of Hardware	7
1.4 Hardware	7
2. Basic Function	. 8
2.1 Power on/off	8
2.2 How to navigate	8
2.3 Function key	9
2.4 Main Menu	9
3. Notepad	11
3.1 What is the Notepad?	11
3.2 Execute and Exit	11
3.3 Structure of Notepad	11
3.4 Open document	12
3.5 Save Document	12
3.6 Edit Document	13
3.7 Find and Replace	13
3.8 Mark	14
3.9 Auto scroll	14
3.10 Setting	14
3.11Manage file/folder	14
3.12 Attribute	15
4. Braille Display	15
4.1 Available Screen Reader	15
4.2 Using USB cable/Bluetooth	15
4.3 Execute and Close	15
4.4 How to pair with Screen reader	15
4.5 Command key in the Braille Display Mode	16
5. Application	17
5.1 Calculator	17
5.2 Alarm	18
5.3 Date and Time	19
5.4 Stop Watch	19
5.5 Count Down	19

5.6 Scheduler	19
6. Option	
7. Information	
8. Command Summary	

# 1. Getting Started

# 1.1 What is the Braille EDGE 40?

(Please write it in detailed)

- Braille Display with screen reader
- Support Notepad function(create/edit document)
- Support many utilities
  - Calculator, Alarm, Scheduler, Stop watch, Count down
- Support mouse interface

# 1.2 Package

- 1) Braille EDGE 40 1 unit
- 2) Power Adapter
- 3) USB Cable
- 4) Carrying Bag
- 5) User Manual
- 6) Hot key Braille Manual

# **1.3 Specification of Hardware**

- 1) Operating System: Windows CE 5.0
- 2) RAM: 128 MB
- 3) CPU: Samsung S3C2443X
- 4) Battery: Lithium polymer.
- 5) Running Time: About 17 hours
- 6) Keyboard: 9 Braille keyboards with Perkins type, 8 Function keys, 8 Navigation buttons, 4 Scroll buttons, 40 cursor routing keys.
- 7) Button: Power button, Bluetooth switch button
- 8) Braille display: 40 refreshable Braille cells
- 9) Bluetooth: 2.0
- 10) Interface:1 USB OTG port(ver.2.0), 1 SD slot
- 11) Sound: Mono speaker
- 12) Size: 31cm x 10.2 cm x 2.2 cm

# 1.4 Hardware

### 1.4.1 Top panel

Let me explain top panel from front to back. On the top panel, there are Braille display, 4 scroll buttons, 40 cursor routing keys, Perkins type 9 Braille keyboards, 8 function keys, 8 navigation buttons, speaker and LED.

Braille Display: 40 cells

Cursor routing key: 40 cursor keys

Scroll button: Each 2 scroll buttons both side.

Braille keyboard: Backspace, dot 3, dot 2, dot 1, Space, dot 4, dot5, dot6, Enter Function key: (From F1 to F8) Esc, Tab, Ctrl, Alt, Shift, Insert, Window, Pop-up. Navigation button: Each 4 navigation button both side. Up/down/left/right arrow buttons.

Speaker and LED: Speaker is located between dot 1 and dot 4. Above navigation key on right side there are two LED light to indicate Bluetooth and power on/off. Left LED light turns blue when Bluetooth turn on and right LED light turn yellow when the unit is turned on while right LED light turn red when the unit is being charged.

#### 1.4.2 Left Side Panel

Let me explain left side panel left side panel from front to back. On the left side panel, there are Bluetooth switch and 1 SD slot.

Bluetooth switch: If you move this switch to back (Bluetooth is on), you can use screen reader via Bluetooth.

If you move this switch to front (Bluetooth is off), you can use screen reader via USB cable.

#### 1.4.3 Right Side Panel

Let me explain right side panel from front to back. There are USB OTG port and AC adapter jack.

#### 1.4.4 Front Pane

Let me explain front panel front panel from right to left. On the front panel, there is only power button. Power button has 2 functions, one is power on/off and the other is sleep mode on/off. If you press power button above 3 seconds, Braille EDGE 40 will turn off or turn on. If you press power button shortly, Braille EDGE 40 will go into sleep mode or wake up from sleep mode.

#### 1.4.5 Rear Panel

Let me explain rear panel from right to left. On the rear panel, there are 'Shut down' button and 'reset' button.

Shut down button: There is a small hole for the 'shut down' button, which is used when reset button doesn't work or when battery is totally dead and AC adapter doesn't solve the problem. You can use a toothpick or the end of a paperclip to press the reset button. Be careful when pressing the reset button because pressing too hard or using an end too small may damage the device if you are not careful.

If you press Shut down button on the rear panel with and then press power button on the front panel, Braille EDGE 40 will reboot. This shut down button will initialize all settings.

# 2. Basic Function

#### 2.1 Power on/off

Press the power button on right side of the front panel above 3 seconds when turning the unit on/off.

While the unit is on if you press the power button shortly, the unit go into sleep mode. If you press the power button shortly again, the unit wake up from the sleep mode.

#### 2.2 How to navigate

Move to the next item: down navigation button or Space-4

Move to the previous item: up navigation button or Space-1 Move to the first item: up navigation button-left navigation button or Space-1-3 Move to the last item: down navigation button-right navigation button or Space-4-6 Move to next 40 item: Alt-up navigation button or Space-1-2-6 Move to previous 40 item: Alt-down navigation button or Space-3-4-5 Execute program: Enter or right navigation button or cursor routing key 2 times Enter sub folder: Enter or right navigation button or cursor routing key 2 times Cancel: Esc key or left navigation button

### 2.3 Function key

(Function keys are explained from left side to right side)

F1: Esc. (Cancel the menu/program)
F2: Tab
F3: Ctrl
F4: Alt. (Call up the menu)
F5: Shift
F6: Insert
F7: Window
F8: Pop up

Note: You cannot multitask with Braille EDGE 40. So there is no function key to call up the main menu on the Braille EDGE 40. If you want to execute other program or menu, you have to close or cancel current menu or program.

#### 2.4 Main Menu

Main Menu consists of 5 Menu, Notepad, Braille Display, Application, Option and Information.

- 1. Notepad
- 2. Braille Display
- 3. Application
- 4. Option
- 5. Information

Shortcut key: shortcut key is on brackets. If you press the shortcut key, you can execute the menu or item.

Sub menu: When there are sub menu, left arrow sign, dots 2-5 and dots 1-3-5 are displayed.

Dialog: When there are dialog, three dot 6 signs are displayed.

### 2.5 Charging and using battery

Check battery status: Space-P (dots 1-2-3-4)

# 2.6 Reset

Use the reset button on the rear panel.

### 2.7 Set date and time

Please follow instructions to set date and time.

1) Press Ctrl-S (dots2-3-4)

Or press 'Alt' or Space-M(dots 1-3-4) and then press on the Set(s).

2) Type time by yourself and when you want to modify, press cursor routing button on the time to move cursor location and type time again. Or you can also use navigation button.

Up/down button: change time

Left/right button: Convert to hour or minute

3) Press ENTER or right navigation button and then you can move to the Month dialog box.

4) Type month, day and year. Ex) 01252012 (25th January, 2012) Or you can also use navigation button.

Up/down button: change date

Left/right button: Convert to month, day, year

5) Press ENTER to save the setting.

### 2.8 Using help menu

Press Space-H (dots1-2-5) to open the help menu. Move to the item with Space-dot 1/space-dot4 and select the item with ENTER.

# 2.9 Using mouse with Braille EDGE 40

You can use mouse with Braille EDGE 40. To connect mouse to Braille EDGE 40, follow below instructions.

1) Connect USB mouse to USB OTG gender.

2) Connect USB OTG gender to the USB OTG port on the Braille EDGE 40.

You can use below function with mouse on the Braille EDGE 40.

- 1) Click on the right mouse button: Open menu/ Alt
- 2) Double click on the right mouse button: Open the global option menu/Space-O (dots1-3-5)
- 3) Click on the left mouse button: Choose or dechoose (Only on the file browser)
- 4) Double click on the left mouse button: Execute the selected function
- 5) Click both right mouse button and left mouse button: Exit function/ Space-Z(dots 1-2-5-6)
- 6) Scroll wheel button down: Move to the below/next item, Space-dot 4
- 7) Scroll wheel button up: Move to the up/previous item, Space-dot 1
- 8) Click on the left mouse button while using Notepad: Start block or exit

Also while using Notepad, you can move by lines by using mouse wheel button.

### 2.10 Global functions

You can use following hot key to check some information.

1) Check capacity of SD card: Space-S

(But, not available when you are on the information, Braille display, Option, global function) 2) Check battery status: Space-P

- 3) Check firmware version: Space-F
- 4) Check Bluetooth status: Space-B
- 5) Check Date and Time: Space-T
- 6) Open option menu: Space-O
- 7) Open online Help: Space-H

Above Global functions are not available, when you are on the information, Braille display, Option menu, dialog box (only help menu is not available) and 7 Global functions.

# 3. Notepad

# 3.1 What is the Notepad?

### (Please write it in detail)

- Braille display
- Support Notetaker functions

Note: Notepad is available only when SD card is inserted to the unit.

(When SD card is not inserted to the unit, 'SD card does not exist' message appears and close the Notepad.)

Notepad only support 'brl' and 'text' file type and computer Braille in both input Braille and view Braille.

# 3.2 Execute and Exit

Notepad is located on the first of the program menu. Execute program: press right arrow button or press cursor routing key 2 times Or you can press shortcut key, N (dots 1-3-4-5).

Exit: Space-z (dots 1-3-5-6) or Esc key.

# 3.3 Structure of Notepad

Braille EDGE 40 consists of 'File/folder list' and 'Document'. When you execute 'Notepad', File/folder in SD card appears at first. To distinguish folder and file, folder name is in the double quotation marks.

The movement key in File/Folder list

- 1)Move to previous item: up navigation button or Space-1
- 2)Move to next item: down navigation button or Space-4
- 3)Move to the first item in current path: up navigation button-left navigation button or Space-1-3
- 4) Move to the last item in current path: down navigation button-right navigation button.

5)Enter folder or open file: right navigation button or Enter

6)Move to the upper folder: left navigation button or Backspace

7) Also you type the first character of the file/folder name to move to the file/folder.

The movement key in the menu item

1)Move to the previous menu: up navigation button or Space-1

2)Move to the next menu: down navigation button or Space-4

3)Move to the upper menu: left navigation button.

4)Enter/Execute menu: right navigation button and Enter

5)Close the menu: Esc key

- 1) Available menu in the File/Folder list. (When pressing ALT or space-1-3-4)
  - (1) Read only
  - (2) Recent File Only
  - (3) Copy
  - (4) Paste
  - (5) Cut
  - (6) Delete
  - (7) New Folder

- (8) New file(9) Rename(10)Find
- (11)Select All
- (12)Attribute
- (13)Exit
- 2) Available menu in the document (When pressing ALT or space-1-3-4)
  - (1) File menu
  - (2) Edit menu
  - (3) Tool menu
  - (4) Insert menu

# 3.4 Open document

1. New document

Move to the desired folder on the folder list and then press Ctrl-N (dots 1-3-4-5) or execute 'New file' under menu.

'noname.br/noname.txt' file will be created and you are in front of the file.

- Open document Press 'Ctrl-O' and then choose the desired file on the folder list and then right navigation button and press ENTER.
- Open recent document (P) Press Ctrl-P (dots 1-2-3-4) on the file list or execute 'recent file open' under Menu. The file which you opened last time will be opened.
- Open document with 'read only' mode (R) Press Ctrl-R (dots1-2-3-5) on the file list. The focused file will be opened with 'read only' mode and you cannot insert character or edit the file at all.

# 3.5 Save Document

- 1. Save
  - Press Ctrl-S (dots 2-3-4) or execute 'save' under 'File' menu.
- 2. Save As

Press Alt-S (dots 2-3-4) or execute 'Save As' under 'File' menu. You can change only file name not file type.

Navigation button in the Document

- 1) Move to next line: Space-1 or up navigation button.
- 2) Move to previous line: Space-4 or down navigation button.
- 3) Move to first line: Space-1-3
- 4) Move to last line: Space-4-6
- 5) Move to previous paragraph: Sapce-3 or Ctrl-up navigation button.
- 6) Move to next paragraph: Space-6 or Ctrl-down navigation button.
- 7) Move to previous page: Space-2-3 or Alt-up navigation button
- 8) Move to next page: Space-5-6 or Alt-down navigation button
- 9) Move to the home of the document: Space-1-2-3 or Ctrl-Alt-up navigation button
- 10) Move to the end of document: Space-4-5-6 or Ctrl-Alt-down navigation button

Also you can move by using up/down navigation button.

On the file, choose the movement type (line, sentence, paragraph and page) with left/right

navigation button. After selecting the type, press up/down navigation button. You will move to some location according to what you selected.

Note: Movement by sentence is available only in the 'txt' document.

# 3.6 Edit Document

1. Select bock

Move to the cursor where you want to start block. Press Ctrl-B (dots 1-2) or execute 'block' under 'Edit' menu. Move to the cursor when you want to finish block with navigation button. Select all: Ctrl-A

- Copy and paste block Copy: Ctrl-C (dots 1-3) Paste: Ctrl-V (dots 1-2-3-6)
- 3. Cut block
  - Ctrl-X (dots 1-3-4-6)
- 4. Delete

Delete character before current cursor: Backspace Delete character on the current cursor: Alt-C (dots 1-3) Delete word on the current cursor: Alt-W (dots 2-4-5-6) Delete current line: Alt-L (dots 1-2-3) Delete block: Ctrl-D (dots 1-4-5)

5. Undo

Press Ctrl-Z (dots 1-3-5-6)

You can undo recent copy, cut, paste or delete function.

- Insert date and time Insert-D: Insert today's date to document. Insert-T: Insert current time to document.
- Insert calculation and result Before executing this function, you should type number and symbols of operation in the document. After that, if you press Insert-R (dots1-2-3-5), result of calculation will be inserted to document.

# 3.7 Find and Replace

### 1. Find (F)

Press Ctrl-F (dots 1-2-4),

a. Text to find

Type what you want to find in the document.

b. Search direction

Choose the direction to find, forward or backward with Space/Backspace or cursor routing key. Default is 'forward'.

Find the character again: Ctrl-Shift-F (dots 1-2-4)

2. Replace (R)

Press Ctrl-R (dots 12-3-5)

a. Text to find

Type what you want to find in the document.

b. Replace

Type what you want to replace the searched word with.

- c. Replace? Yes, no or all
  - If you want to replace 1 times, press Y (dots 1-3-4-5-6)
  - If you don't want to replace, press N (dots 1-3-4-5)
  - If you want to replace all word, press A (dot 1)

Or you can press cursor routing key on what you want.

Note: 'Replace' function is available only forward direction.

### 3.8 Mark

- 1. Set Mark
- Press Ctrl-M (dots 1-3-4). You can set mark up to 10 marks.
- 2. Move Mark

Press Ctrl-J (dots 2-4-5) and type the mark number and then press ENTER. Or press mark number with Ctrl.

### 3.9 Auto scroll

Press up scroll button and down scroll button at one time. Cancel: Esc key

# 3.10 Setting

Press Ctrl-E (dots 1-5)

- a. View format character: On/off Insert-C (dots 1-4)
- Reading unit: line/sentence/paragraph/page Left navigation button, Right navigation button Default is line.
- c. Read only: On/off Alt-R (dots 1-2-3-5)
- Auto scroll speed:1~36
   Shift-left navigation button, Shift-navigation button
   Document type: Braille/Text

### Default is Braille.

f. Block blink: On/off (This function makes the cursor between block blink or not)

# 3.11Manage file/folder

Press Ctrl-O (dots 1-3-5) or press Alt and then press 'enter' on "File Browser" under 'File' menu.

You can open the file list without closing or exiting Notepad. With this function, you can manage file/folder or open the document.

 Copy file and folder (C) Ctrl-C (dots 1-3) You can copy the file/folder to clipboard.

Cut/Paste file and folder (X)
 Cut file and folder: Ctrl-X (dots 1-3-4-6)
 Move to the desired path to move the file.

Paste file and folder: Ctrl-V (dots 1-2-3-6) You can copy the file/folder to clipboard.

- 3. Delete file and folder (D) Ctrl-D (dots 1-4-5)
- 4. Select block

Select each file/folder: Space Select all file/folders: Ctrl-A Cancel: Esc keyCreate new folder Ctrl-F (dots 1-2-4)

You can type the folder name and then press ENTER.

6. Rename file and folder (E)

Ctrl-E (dots 1-5)

You can type new name or move the cursor to where you want to edit and then type rest of name.

7. Find file and folder (S)

Ctrl-S (dots-2-3-4)

You can find the file/folder on the current path and sub folder with some part of file/folder name characters.

# 3.13 Attribute

Ctrl-I (dots 2-4) You can check information of folder/file: size, date, time, protection status (write/read).

# 4. Braille Display

# 4.1 Available Screen Reader

- 1) Jaws (Freedom scientific)
- 2) Window eyes (GW micro)
- 3) Supernova (Dolphin)
- 4) Voice over (Apple)
- 5) Mobile speak (Code factory)
- 6) Talks and Zooms(Nuance)

# 4.2 Using USB cable/Bluetooth

You can choose either USB mode or Bluetooth mode.

If you want to connect Braille EDGE 40 with screen reader via Bluetooth mode, move Bluetooth switch to the rear.

Or if you want to connect Braille EDGE 40 with screen reader via USB cable, move Bluetooth switch to the front.

# 4.3 Execute and Close

Move to 'Braille display' on the main menu and pres ENTER. Connect USB cable to the USB mini port. Press 'b (dots 1-2) on the main menu.

When the Bluetooth switch is set to 'USB mode', Braille display mode automatically will be executed as soon as connecting USB cable to the mini port.

Even when Braille EDGE 40 is in the sleep mode, Braille EDGE 40 automatically will turn on and Braille display automatically will be executed as soon as connecting USB cable to the mini port. Close: Space-z (dots 1-3-5-6).

# 4.4 How to pair with Screen reader

(The way to pair is same as Braille Sense PLUS so please describe it in detail)

# 4.4.1 Connect via USB port

(Please write in detail)

### 4.4.2 Connect via Bluetooth serial port

#### (Please write in detail)

### 4.4.3 Pair with IOS devices

(Please write in detail)

### 4.4.4 Command key in the VoiceOver

- 1) Space-dot 1: Move to previous item
- 2) Space-dot 4: Move to next item
- 3) Space-dot3 : Move to previous item by using rotor setting
- 4) Space-dot 6: Move to next item by using rotor setting
- 5) Space-dot 2: Select previous rotor setting
- 6) Space-dots 5-6: Select next rotor setting
- 7) Space-dots 1-2-3: Move to the first item in the area
- 8) Space-dots 4-5-6: Move to the last item in the ares
- 9) Space-dots 1-2-3-5: Read all from selected object
- 10) Space-dots 2-4-5-6: Read all from first object in selected area
- 11) Space- H(dots 1-2-5): Go to home screen
- 12) Space-S(dots 2-3-4): Move to status bar
- 13) Space-dots 3-4-5: Volume down on device
- 14) Space-dots 1-2-6: Volume on device
- 15) Space-B(dots1-2): Go Back, cancel, close pop-up
- 16) Space-dots 3-4: Speaks the current page number and position
- 17) Space-Backspace or Space-D(dots1-4-5): Delete/Backspace key
- 18) Space-Enter or Space-dots 1-5: Enter key
- 19) Space-T(dots 2-3-4-5): Tab key
- 20) Space-Y(dots 1-2-3-4-5-6): Toggle screen curtain on/off
- 21) Space-P(dots 1-2-3-4): Pause/Resume speech
- 22) Space -M(dots 1-3-4): Mute/ Unmute speech
- 23) Space -U(dots 2-4-6): Move screen/page to the left
- 24) Space -O(dots 1-3-5): Move screen/page to the right
- 25) Space dots 2-3-5: Deselect text
- 26) Space- dots 2-5-6: Select text
- 27) Space- dot 2: Pan Braille left
- 28) Space- dot 5: Pan Braille right
- 29) Space N(dots 1-3-4-5): Toggle announce history, Dot 1 or 4 to browse
- 30) Space G(dots 1-2-4-5): Toggle Contracted Braille on/off

#### 4.4.5 Help menu

If you press 'Space-K (dots 1-3), you can find the command key in the Voiceover while paring with VoiceOver.

To exit help menu, press 'Space-B(dots 1-2) on the Braille EDGE 40 or 'home' button on the i-device.

### 4.5 Command key in the Braille Display Mode

- 1) Backspace: Backspace or space-1-2
- 2) Delete: Space-1-4-5
- 3) Insert: F6
- 4) Alt: F4
- 5) Alt+[Character]: F4-[Character]
- 6) Enter: Enter or Space-1-5
- 7) Ctrl: F3
- 8) Ctrl+[Character]: F3-[Character]
- 9) Tab: F2
- 10) Shift-Tab: F2-F5
- 11) Ctrl-Tab: F2-F3

- 12) Ctrl-Shift-Tab: F2-F3-F5
- 13) Esc: F1
- 14) Shift-Esc: F1-F5
- 15) Ctrl-Shift-Esc: F1-F3-F5
- 16) Shift+[Character]: F5-[Character]
- 17) Caps Lock: Space-U(dots 1-3-6)
- 18) Up arrow: Up Navigation button or Space-1
- 19) Down arrow: Down Navigation button or Space-4
- 20) Left arrow: Left navigation button or Space-3
- 21) Right arrow: Right navigation button or Space-6
- 22) Ctrl-left arrow: Space-2
- 23) Ctrl-right arrow: Space-5
- 24) Page up: Space-2-3
- 25) Page down: Space-5-6
- 26) Ctrl-page up: Space-1-2-6
- 27) Ctrl-page down: Space-3-4-5
- 28) Home: Space-1-3
- 29) End: Space-4-6
- 30) Ctrl-Home: Space-1-2-3
- 31) Ctrl-End: Space-4-5-6
- 32) F1 ~ F12: Space-1~12th cursor routing key.
- 33) Win: F7
- 34) Pop up: F835) Win+[Character]: F7-[Character]
- 36) Pause key: Space-p(1-2-3-4)
- 37) Space: Space
- 38) Alt-F4: Space-1-3-4-6

# 5. Application

### 5.1 Calculator

Only computer Braille is available.

- View calculation result (=): Enter
- Type new calculation: Enter
- Plus: dots 3-4-6
- Minus: dots 3-6
- Multiply by: dots 1-6
- Divided by: dots 3-4
- Percent: dots 1-4-6
- Power: dots 4-5-7
- Decimal point: dots 4-6
- Left parenthesis: dots 1-2-3-5-6
- Right parenthesis: dots 2-3-4-5-6
- Reset all: Ctrl-A
- Save file: Ctrl-S
- : Default file name is 'Resul.txt' and changeable which is saved in root of SD card.
- Copy line: Ctrl-C
- : You can save calculation and result of current line to clipboard.
- Paste: Ctrl-V
- : You can paste what is saved in the clipboard to current line.
- Copy Result: Ctrl-R
- : You can save last calculation and result to clipboard.
- Review previous calculation and result: Up navigation button

: If you want to use previous calculation, press cursor routing key, locate what you want and edit the calculation.

Close: ESC key

You can find above 5 Menu, 'Reset all' 'Ctrl-A Save file' 'Ctrl-S Copy line' 'Ctrl-C Paste' and 'Ctrl-V Copy Result' under menu by using ALT or Space-M (dots 1-3-4)

When you input negative number, you have to use left/right parenthesis and minus sign with number, for example (-2).

How to use % sign in calculator are followings.

Ex 1) When there are plus/minus signs before percent sign

90+20%:

As soon as you type percent (%) sign, number 20 will be turned to number 18, since 90 divided by 20% is 18. Finally, the result of calculation is 108 (90+18).

Ex 2) When there are multiple by/divided by signs before percent sign.

20\*40%:

As soon as you type percent (%) sign, number 40 will be turned to number 0.4, since 40% means 0.4.

# 5.2 Alarm

(1) Set time

When you execute 'Alarm', you are located on the 'hour'. Change time: press up/down navigation button or type the time directly. Move between hour and minute: right/left navigation button. Save setting: Enter

(2) Term

There are 3 options, once, weekdays, everyday and you can choose it with up/down navigation button.

- Save setting: Enter

(3) Duration

You can choose duration from 1 minute to 9 minutes and default is 5 minutes and you can choose it with up/down navigation button.

Save setting: Enter

(4) Wake up call times

You can choose call times from 1 to 5 and default is 3 times and you can choose it with up/down navigation button.

- Save setting: Enter

#### (5) Repeat interval

You can choose interval from 1 minute to 9 minutes and default is 5 minutes and you can choose it with up/down navigation button.

- Save setting: Enter
- Cancel: ESC key

When alarm goes off with "Alarm stop?stop or Yes to all" message, how to stop the alarm is below.

If you want to stop 1 time of alarm, press ENTER. (Current cursor is located on the stop.) If you want to all alarm times,

1) Move the cursor to the 'Yes to all' and press ENTER or routing cursor button 2 times.

2) Press space/backspace or Space-dot1/Space-dot24 to change cursor and then press ENTER

### 5.3 Date and Time

View 'date and time': Execute 'date and time' menu under 'Application' menu.

To set 'date and time' press Ctrl-S.

Move among hour/minute/date: right/left navigation button.

Choose time: press up/down navigation button or type the correct number.

- Save: Enter
- Cancel: ESC key

You can call up setting options menu with ALT key or Space-dots 1-3-4 in order to change 'date and time'. Move to the 'Option' with up/down navigation button and then press ETNER

Time zone: choose the option with space or type first character. Use daylight saving (on/off): Choose the option with space. Time format (12hours/24hours): Choose the option with space.

- Save: Enter
- Cancel: ESC key

#### 5.4 Stop Watch

Start/Stop: Enter Ex) Start at 00:00:00 Pause: Space Reset: Backspace

### 5.5 Count Down

Move among hour/minute/second: right/left navigation button. Choose time: press up/down navigation button or type the correct number. Start/Stop: Enter Pause: Space Reset: Backspace Close: ESC key When count-down gets zero, alarm goes off for10 seconds. Press anything to stop this alarm.

### 5.6 Scheduler

When you execute 'Scheduler', month, year, week and date appear. Date starts from Sunday to Saturday and today's date is in brackets. If you want to move other weeks, locate cursor to week and press up/down navigation button. If some date has appointment, asterisk is displayed in front of the date. If you want to check the appointment, press ENTER on the date. Appointments are arranged in chronological order.

Scheduler contains 8 Menu which appear with ALT key or Space-dots 1-3-4. Move among 8 Menu: up/down navigation button, Space-1/Space-4. Move to the first Menu: up navigation button-left navigation button. Space-dots 1-3 Move to the last Menu: down navigation button-right navigation button. Space-dots 4-6 Execute Menu: Enter/Press cursor routing key 2 times. Type shortcut key

#### (1) View Calendar

When Scheduler program is opened, you can view calendar at first.

Move to the previous/next week: Up/down navigation button

Move to the previous/next month: Move the cursor to month and press up/down navigation button.

Move to the previous/next year: Move the cursor to month and press up/down navigation button.

If there are some appointments on the date, asterisk sign appears in front of the date.

#### (2) New appointment

Move the cursor to desired date and then press Ctrl-N or ENTER.

a. Date

Move the cursor to the month, date and year and press up/down navigation button or type the number directly in order to change the date. After that, press ENTER to move next item.

b. Time

Choose the time with same way as Date.

c. Alarm Time

You can choose up to 47:59. If you don't want alarm, choose "off" and if you want alarm, choose "00:00". Press ENTER to move next item.

#### d. Subject

Type the subject of appointment up to 140 characters. Press ENTER to save all options or ESC key to cancel all options.

#### (3) Modify appointment

Move the cursor to desired date and then press Ctrl-M or execute 'Modify appointment' under Menu.

How to modify appointment is same as 'New appointment'.

#### (4) View All appointment

Execute 'View All appointment' under Menu. While viewing appointment, also you can manage appointments.

#### (5) Search appointment

Ctrl-F or execute 'Search appointment' under Menu. When 'Find:' dialog box appears, type what you want and press ENTER.

#### (6) Delete appointment

Navigate cursor to the desired date and press Ctrl-D or execute 'Delete Appointment' under Menu.

When prompt dialog box appears, press ENTER, Y or cursor routing key on 'Yes' character in the Braille cell.

But if you don't want to delete appointment,

- 1) Locate cursor to the 'No' and press ENTER.
- 2) Press N.
- 3) Press Space or Backspace and then ENTER.

#### (7) Copy appointment

Navigate cursor to the specific date which you want to copy and press Ctrl-C. You can paste copied appointment in clipboard to Notepad with Ctrl-V.

#### (8) Backup appointment

Ctrl-B Backup file will be saved in the database folder of SD card.

# (9) Restore appointment

Ctrl-R

# 6. Option

Navigating key: Space-4/Space-1, up/down navigation button, up/down scroll button Change the setting: Space/Backspace Save the option: Enter Cancel: ESC

Followings are options which you can set up.

- Edit dot mode: On/Off
- Show File attributes: On/Off
- Startup Mode: Main menu/New file/Recent file/ Braille display/Calculator
- You can choose which program/menu is executed when turning on Braille EDGE 40.
- Play Sound: On/Off
- View Message Grade: Contracted/Uncontracted/Computer Braille
- Braille Tables: Spanish/French/Germany/Italian/English/UK
   You can choose which Braille table is used when opening .brl file in the Notepad. Default is English.
- Message Display Time: Ignore/1sec/2sec/3sec/4sec/5sec/Stand by
   When you choose 'stand by' option, all message used in the Braille EDGE 40 remains until you press anything.
- Power Saving Mode: On/Off
   You can choose whether Braille EDGE 40 in sleep mode after 10 minutes. Default is 'On'.
- View file lists: On/off
- You can choose which file type can be displayed on the file list of Notepad. With this option, you can view other file type which cannot be opened on the Braille EDGE 40 such as doc and docx.
- Backup/restore: Backup/restore/initialize

# 7. Information

You can check 4 items.

- : SD card memory (total memory, free space)
  - Power status (battery level, power type (adapter/battery)) Firmware version (Version number, build date)

Bluetooth (Bluetooth name, pin code)

Among 4 items, you can navigate with up/down Navigation button and Space-1/Space-4.

# 8. Command Summary

# Common

Move to the next item: down navigation button or Space-4

Move to the previous item: up navigation button or Space-1 Move to the first item: up navigation button-left navigation button or Space-1-3 Move to the last item: down navigation button-right navigation button or Space-4-6 Move to next 40 item: Alt-up navigation button or Space-1-2-6 Move to previous 40 item: Alt-down navigation button or Space-3-4-5 Execute program: Enter or right navigation button or cursor routing key 2 times Enter sub folder: Enter or right navigation button or cursor routing key 2 times Cancel: Esc key or left navigation button Exit: Space-z (dots 1-3-5-6) or Esc key. Enter folder or open file: right navigation button or Enter Move to the upper folder: left navigation button or Backspace Call up the menu: Space-1-2-4 or Alt

#### Notepad

Open new document: Ctrl-N (dots 1-3-4-5) Open recent document: Ctrl-P (dots 1-2-3-4) Open document with 'read only' mode: Ctrl-R (dots1-2-3-5) Move to next line: Space-1 or up navigation button. Move to previous line: Space-4 or down navigation button. Move to first line: Space-1-3 Move to last line: Space-4-6 Move to previous paragraph: Sapce-3 or Ctrl-up navigation button. Move to next paragraph: Space-6 or Ctrl-down navigation button. Move to previous page: Space-2-3 or Alt-up navigation button Move to next page: Space-5-6 or Alt-down navigation button Move to the home of the document: Space-1-2-3 or Ctrl-Alt-up navigation button Move to the end of document: Space-4-5-6 or Ctrl-Alt-down navigation button Select block: Ctrl-B (dots 1-2) Select all: Ctrl-A Cut block Ctrl-X (dots 1-3-4-6) Copy: Ctrl-C (dots 1-3) Paste: Ctrl-V (dots 1-2-3-6) Delete character on the current cursor: Alt-C (dots 1-3) Delete word on the current cursor: Alt-W (dots 2-4-5-6) Delete current line: Alt-L (dots 1-2-3) Delete block: Ctrl-D (dots 1-4-5) Undo: Ctrl-Z (dots 1-3-5-6) Insert-D: Insert today's date Insert-T: Insert current time Insert calculation and result: Insert-R (dots1-2-3-5), Find: Ctrl-F (dots 1-2-4), Find the character again: Ctrl-Shift-F (dots 1-2-4) Replace: Ctrl-R (dots 12-3-5) Set Mark: Ctrl-M (dots 1-3-4). Move Mark: Ctrl-J (dots 2-4-5) Auto scroll: up scroll button-down scroll button View format character: Insert-C (dots 1-4)

Read only: Alt-R (dots 1-2-3-5) Auto scroll speed: Shift-left navigation button or Shift-navigation button Copy file and folder: Ctrl-C (dots 1-3) Cut file/folder: Ctrl-X (dots 1-3-4-6) Paste file/folder: Ctrl-V (dots 1-2-3-6) Delete file/folder: Ctrl-D (dots 1-4-5) Select all file/folders: Ctrl-A Create new folder: Ctrl-F (dots 1-2-4) Rename file/folder: Ctrl-E (dots 1-5) Find file/folder: Ctrl-S (dots-2-3-4) Attribute: Ctrl-I (dots 2-4)

#### **Braille Display**

Backspace: Backspace or space-1-2 Delete: Space-1-4-5 Insert: F6 Alt: F4 Alt+[Character]: F4-[Character] Enter: Enter or Space-1-5 Ctrl: F3 Ctrl+[Character]: F3-[Character] Tab: F2 Shift-Tab: F2-F5 Ctrl-Tab: F2-F3 Ctrl-Shift-Tab: F2-F3-F5 Esc: F1 Shift-Esc: F1-F5 Ctrl-Shift-Esc: F1-F3-F5 Shift+[Character]: F5-[Character] Caps Lock: Space-U(dots 1-3-6) Up arrow: Up Navigation button or Space-1 Down arrow: Down Navigation button or Space-4 Left arrow: Left navigation button or Space-3 Right arrow: Right navigation button or Space-6 Ctrl-left arrow: Space-2 Ctrl-right arrow: Space-5 Page up: Space-2-3 Page down: Space-5-6 Ctrl-page up: Space-1-2-6 Ctrl-page down: Space-3-4-5 Home: Space-1-3 End: Space-4-6 Ctrl-Home: Space-1-2-3 Ctrl-End: Space-4-5-6 F1 ~ F12: Space-1~12th cursor routing key. Win: F7 Pop up: F8 Win+[Character]: F7-[Character]

Pause key: Space-p(1-2-3-4) Space: Space Alt-F4: Space-1-3-4-6

# Application

1) Calculator View calculation result (=): Enter Type new calculation: Enter Plus: dots 3-4-6 Minus: dots 3-6 Multiply by: dots 1-6 Divided by: dots 3-4 Percent: dots 1-4-6 Power: dots 4-5-7 Decimal point: dots 4-6 Left parenthesis: dots 1-2-3-5-6 Right parenthesis: dots 2-3-4-5-6 Reset all: Ctrl-A Save file: Ctrl-S Copy line: Ctrl-C Paste: Ctrl-V Copy Result: Ctrl-R Review previous calculation and result: Up navigation button

### 2) Stop Watch

Start/Stop: Enter Pause: Space Reset: Backspace

### 3) Count Down

Start/Stop: Enter Pause: Space Reset: Backspace Close: ESC key