

SEIKA

Braille Display

User's Manual
V3 Pro Version 1.0



Preface

Thank you very much for purchasing Seika3 Pro Braille Display.

The Seika refreshable Braille display provides a tactile interface to your computer.

Before using the Seika display, please read this user's manual.

If there is anything that you don't understand about using the display, or if you find mistakes or omissions in this user's guide, please contact distributors by letter, FAX, or telephone.

Safety Precautions:

This User's manual describes safety precautions according to the following level and marks of warning.

Warning mark	Mark to Prohibit	Procedures
		
Warning Caution	Actions Prohibited	Disconnect the power plug



【Warning】

This precaution must be followed, or it could cause of fire or electric shock which could result in serious injuries or death.



【Caution】

This precaution must be followed, or it may cause of electric shock and/or any other accidents which may result in injuries and/or partial damage of the products or surrounding equipment.

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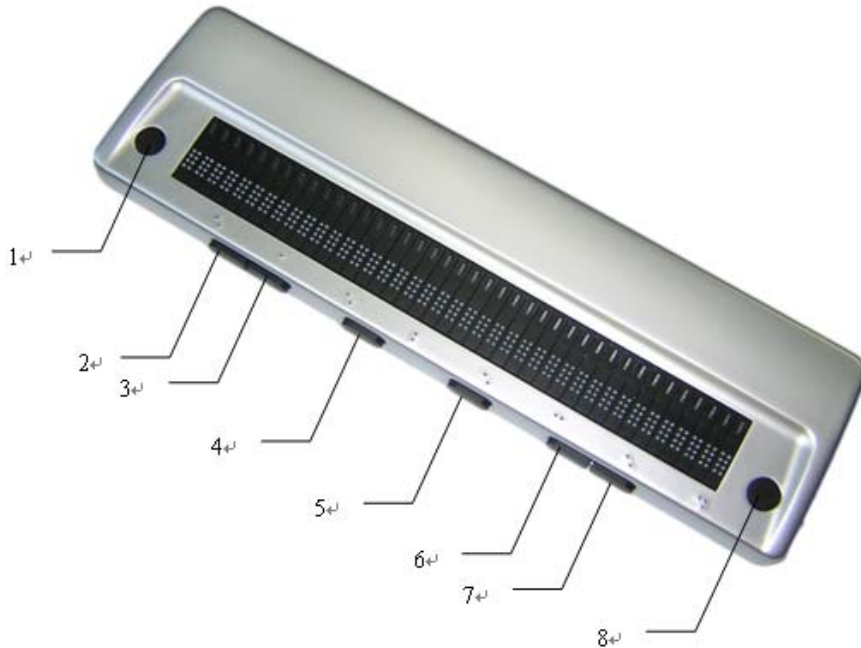
Quick Installation Guide

- The below steps assume that you have installed the screen reader and windows in their default locations.
- Install Seika Braille display driver (refer to Chapter 3).
- Install the Seika patch program and configure your screen reader (refer to Chapter 4 for Jaws, Chapter 5 for Window-Eyes, Chapter 6 for HAL and Supernova, Chapter 7 for COBRA, Chapter 8 for NVDA).

Chapter 1 – Overall description of the Seika Braille Display

1. Name and Functions of All Components

1.1 Overall Illustration of the Product



1~8---Navigation and Control Keys

Seika Braille Display's size:

12.99(W) x 3.58(D) x 0.98(H) inches and weight: 600g

Display

There are 40 refreshable Braille cells (8-pin).



【Caution】 :Please touch the Braille cell with clean finger, otherwise the dust will block the pins.

Cell Position Mark

It marks the cell position. There is the position mark per 5 cells. From left to right the position mark means the 1st, 5th, 10th, 15th, 20th, 25th, 30th, 35th, 40th cell.

Navigation and Control Keys

Place the Seika Braille Display on a flat surface with the Braille display facing upwards and the buttons facing towards you.

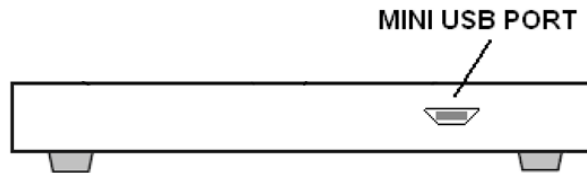
Top surface keys are located on the top of the Seika Braille Display.

- Behind the Braille cells are the CURSOR ROUTING BUTTONS. These tiny buttons are used to move the computer's cursor directly to a particular location on the screen.
- Near each end of the Braille display is a small round button. The LEFT BUTTON is to the left and the RIGHT BUTTON is to the right.

Front panel navigation keys are located on the front edge, facing the user.

- On the left half of the front panel is the LEFT CTRL which contains LEFT CTRL LEFT and LEFT CTRL RIGHT.
- In the middle of the front panel are two buttons. The LEFT SHIFT is toward the left and the RIGHT SHIFT is toward the right.
- On the right half of the front panel is the RIGHT CTRL which contains RIGHT CTRL LEFT and RIGHT CTRL RIGHT.

1.2 Description of the right side



Mini USB Port

On the right side of the display, there is a Mini USB port. You could connect Seika with the computer by plugging in a USB cable.



【Caution】 : When a laptop computer is used for operating the Braille display, please make sure that it is supplied with power via the electrical cable rather than battery. Otherwise it may cause a deficiency in the power supply.

2. Beep indication

Seika will beep twice when it is connected with a computer in which the Seika driver is installed successfully.

3. Sleep mode

The Braille display will sleep if there is not any operation within one minute. You could wake up the Seika Braille display by press any button or activate your screen reader.

Chapter 2 - Setup

1. Service Precautions (at setup time)



【Prohibited】: Avoid using the display in the following conditions, which may cause malfunctions.

- Direct sunlight, near air conditioners or outside.
- High humidity, such as those near a water supply or humidifier, or any place with water, oil, or chemicals.
- Avoid contact with dust, waste particles, near open windows, or locations with any toxic gases or iron powder.



【Caution】: Please touch the Braille cell with clean finger, otherwise the dust will block the pins.

Also, do not install the display near any televisions, radios, speakers, short-wave radios, or anything that is magnetic or emits radio waves. If you use it adjacent to any of these items, it can interfere with reception.

2. Installation Space



【Caution】: Install the product in a location which meets the following criteria:

- The product must be installed on a level surface.

- It is recommended to avoid putting anything heavier than a keyboard or a laptop computer or similar on top of the device as it may cause malfunction.

3. Operating Environment

- Temperature: 41 – 95 °F (5 – 35 °C)
- Humidity: 20 - 80% (no condensation)

4. Precautions for Moving



【Warning】

- Violent shaking or vibrations at the time of moving may cause product failures.



【Requirement】

- Turn off the computer which is connected with the Seika, and disconnect the USB cable, then move the Seika.

Chapter 3 - Seika Braille Display Driver

Installing Seika Braille display driver (Windows XP / Vista / Windows 7)

Before using Seika with the screen reader, please install Seika Braille display driver. Make sure that Seika Braille display is not connected to your computer.

- Run "*Seika Driver XP_Vista_Win7 V6.3a.exe*" in the "Seika driver" folder in the CD.
- Select "Install" to install Seika Braille display driver.
- When prompted "Installation Successful", press ENTER.
- Follow the instruction and restart your computer.
- The Seika driver is installed successfully.

Chapter 4 – Using Seika Braille Display with JAWS

(For JAWS version 10.0.1154 and later)

NOTE:

The below steps assume that you have already install Seika driver and Jaws version 10.0.1154 or later. If you have not installed Seika driver, please refer to Chapter3.

If you have already installed the older version of Seika Patch for JAWS, please refer to the 4.3.1 Uninstall the old version of Seika patch for Jaws, and uninstall the old version of Seika patch.

1. Installing Seika Patch for JAWS

- Open the “Seika patch for JAWS” folder in the CD. Run the Seika Patch for JAWS according to your Windows operating system.
- Install the patch by default steps. The Seika Patch for JAWS will be installed by the JAWS Utility automatically. A console window appears and it will take several minutes.

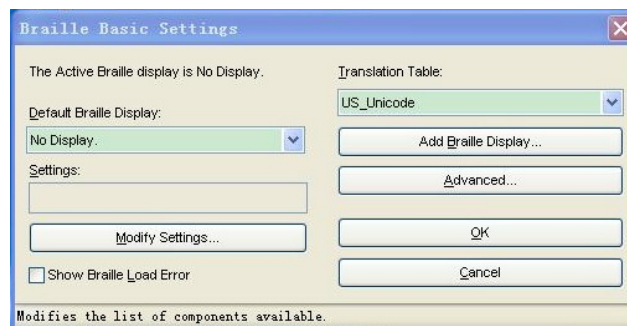
2. Working in JAWS

2.1 Configuring JAWS

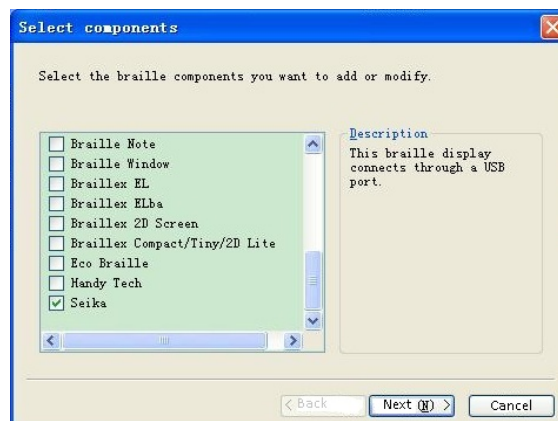
- Connect the Seika display with your computer.
- Start JAWS and select “Braille...” in the “Options” menu.



- Assuming that the default Braille display is set to “No display”, tab to the “Add Braille Display” button and press enter.

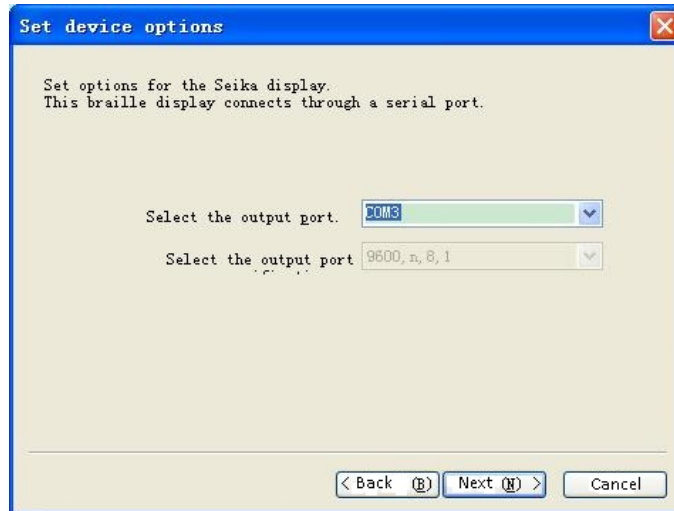


- In the “Select components” dialog box, there is a list of Braille displays. Select the “Seika” by pressing the space bar.

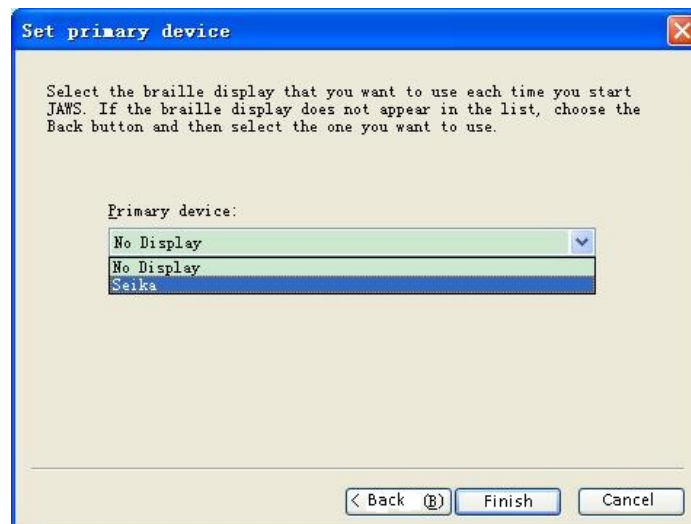


- Tab to the “Next” button and press enter.

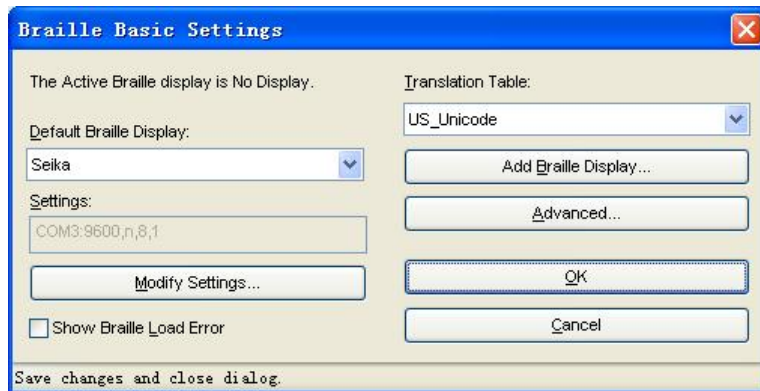
If you already connected Seika with your computer by USB cable, the output port will be set automatically, it does not need change.



- Tab to the “Next” button and press Enter.
- When prompted to set the primary device, select “Seika” in the “Primary device” list.



- Tab to the “Finish” button and press enter.
- In the “Braille Basic Settings” dialog box, tab to the “OK” button and press it.

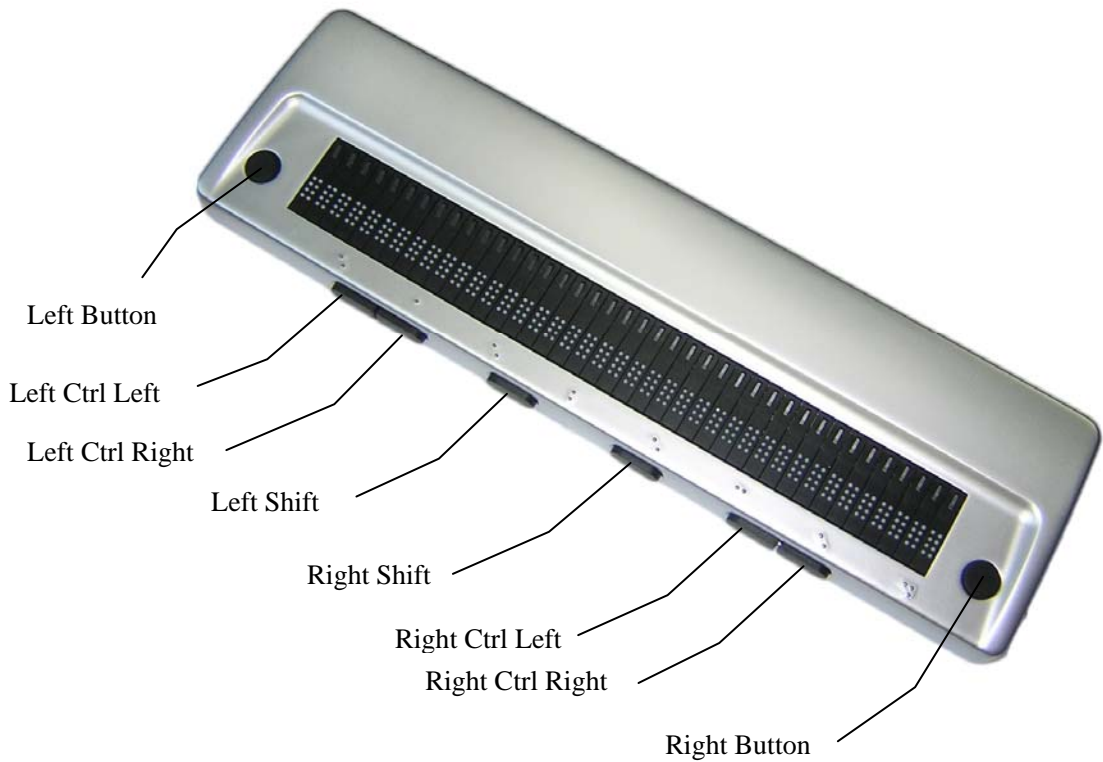


- Restart the JAWS and the Seika Braille Display will work now.

NOTE: if the Seika could not work with Jaws, please check the setting of output port in Jaws by the following steps.

- Run the “Detect Seika COM Port V1.0.exe” in the “tool” folder in the CD, remember the Seika COM port number.
- In the “Braille Basic Settings” dialog box, press the button of “Modify Settings...”. In the “set device options” dialog box, you can manually select the output port which you remember.

2.2 Navigation and control keys function



Braille Commands:

Description	Command
Braille Mode Toggle	Left Button + Right Button
Attribute/Character mode toggle	Left Ctrl Left + Right Ctrl Left
Adjust Braille Option Dialog	Left Ctrl Left + Left Shift
Attribute Marking Off	Left Button + Left Ctrl Left + Left Shift
Braille Marking Off	Left Button + Left Ctrl Left + Left Shift
8-Dot/6-Dot Toggle	Right Shift + Left Shift + Right Ctrl Right
8 Pixels/Unlimited Pixels Per Space	Left Shift + Right Shift + Right Ctrl Left
Repeat Last Flash Message	Left Ctrl Left + Right Ctrl Right

Navigation Commands:

Description	Command
Auto Advance Mode	Left Ctrl Right + Right Ctrl Left
Increase Auto Advance Speed	Left Button + Right Shift
Decrease Auto Advance Speed	Left Button + Left Shift
Top Of Window	Left Ctrl Left
Bottom Of Window	Left Ctrl Right
Pan Left	Left Button
Pan Right	Right Button
Braille Next Line	Right Ctrl Left
Braille Prior Line	Right Ctrl Right
PAGE DOWN (Active Cursor)	Left Ctrl Right + Right Shift
PAGE UP (Active Cursor)	Left Ctrl Left + Right Shift
TAB	Left Shift + Right Ctrl Left
CTRL+TAB	Left Ctrl Right + Right Button
SHIFT+TAB	Left Shift + Right Ctrl Right
CTRL+SHIFT+TAB	Left Ctrl Left + Right Button

Cursor Commands:

Description	Command
Braille follows Active	Left Shift
Active follows Braille	Left Shift + Right Shift
Route Braille To Active	Right Shift
Screen Reader Cursor	Right Button + Right Ctrl Left
Mouse Button Right Click	Left Shift + Right Button
PC Cursor	Right Button + Right Ctrl Right
Route Screen Reader to PC Cursor	Right Shift + Right Ctrl Right
Route PC to Screen Reader Cursor	Right Shift + Right Ctrl Left
Select Text	Any Cursor Routing Button + Right Shift

3. Uninstalling the patch of JAWS

NOTE:

Uninstall the patch of JAWS will disable the Seika Braille Display work with JAWS and delete all the patch files.

You must uninstall this patch before uninstall the JAWS.

3.1 Uninstall the old version of Seika patch for Jaws

Open the “Add or Remove Programs” in the “Control Panel”, and select the item: “Seika Braille Display version 3” or “Seika Patch for JAWS V1.x” or “Seika Patch for JAWS V2.x”. Uninstall the item step by step. The uninstall will taking several minutes. Please restart computer after finished.

3.2 Uninstall the current version of Seika patch for Jaws

Open the “Add or Remove Programs” in the “Control Panel”, and select the item: “Seika Patch for JAWS V2.2”. Uninstall the “Seika Patch for JAWS V2.2” step by step. The uninstall will taking several minutes. Please restart computer after finished.

Chapter 5 – Using Seika Braille Display with Window-Eyes

NOTE:

The below steps assume that you have already install Seika driver and Window-eyes version 7.2 or later. If you have not installed Seika driver, please refer to Chapter3.

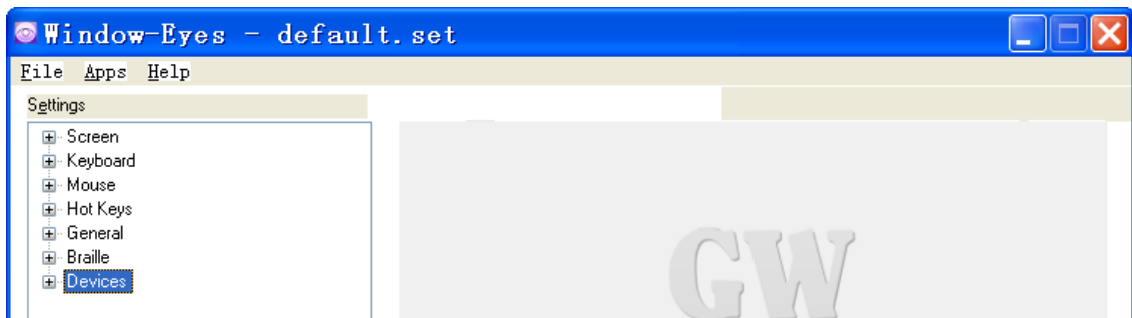
1. Working in Window-Eyes

1.1 Configuring Window-Eyes 7.2

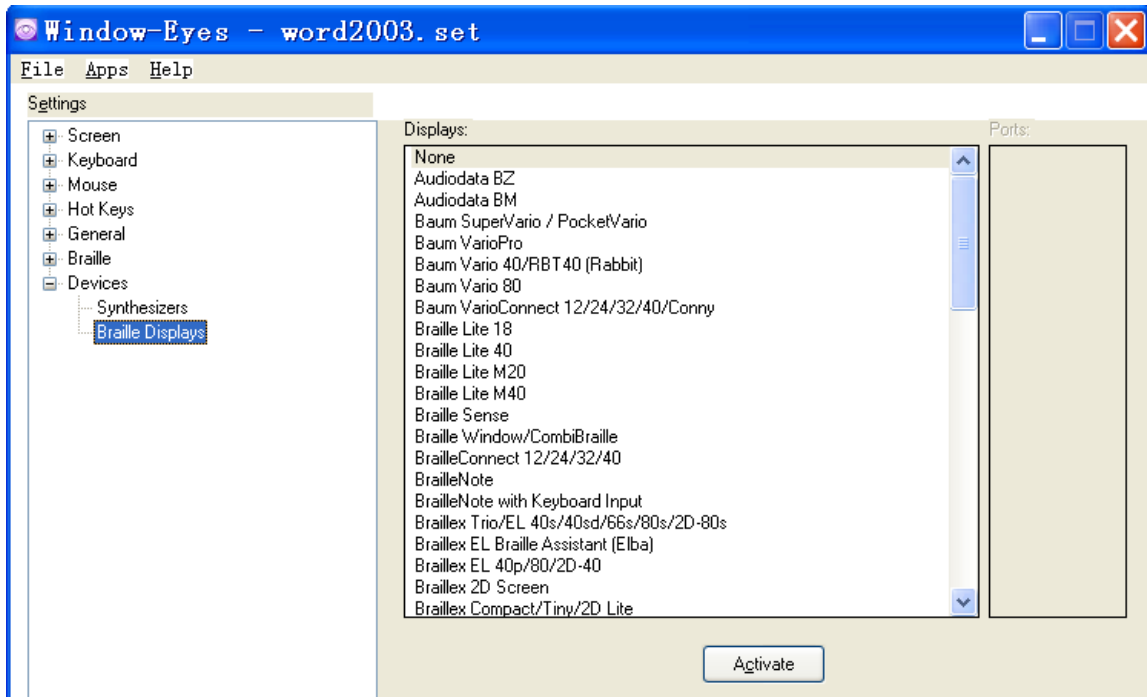
- Connect the Seika display.
- Run the “Detect Seika COM Port V1.0.exe” in the “tool” folder in the CD, remember the Seika COM port number.
- Start Window-eyes 7.2.
- Select “File” in Window-Eyes, and then select “Select Braille Display”.
- Select “Seika” in “Braille” option.
- In “Ports” option, select the Seika COM port number which you remember.
- Select OK button.

1.2 Configuring Window-Eyes 7.5

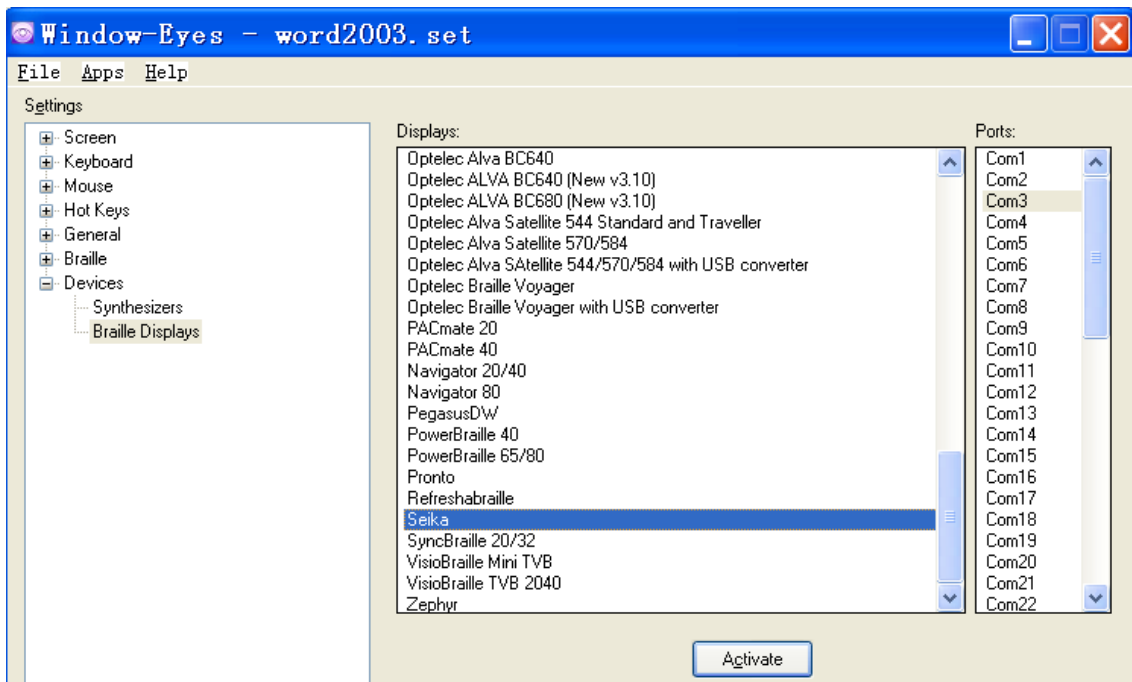
- Connect the Seika display.
- Run the “Detect Seika COM Port V1.0.exe” in the “tool” folder in the CD, remember the Seika COM port number.
- Start Window-eyes 7.5 and select “Device” in the “Settings” list.



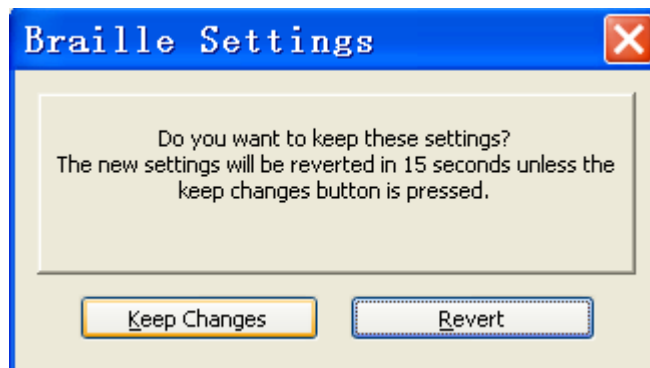
- Select “Braille Display” in the “Device” list.



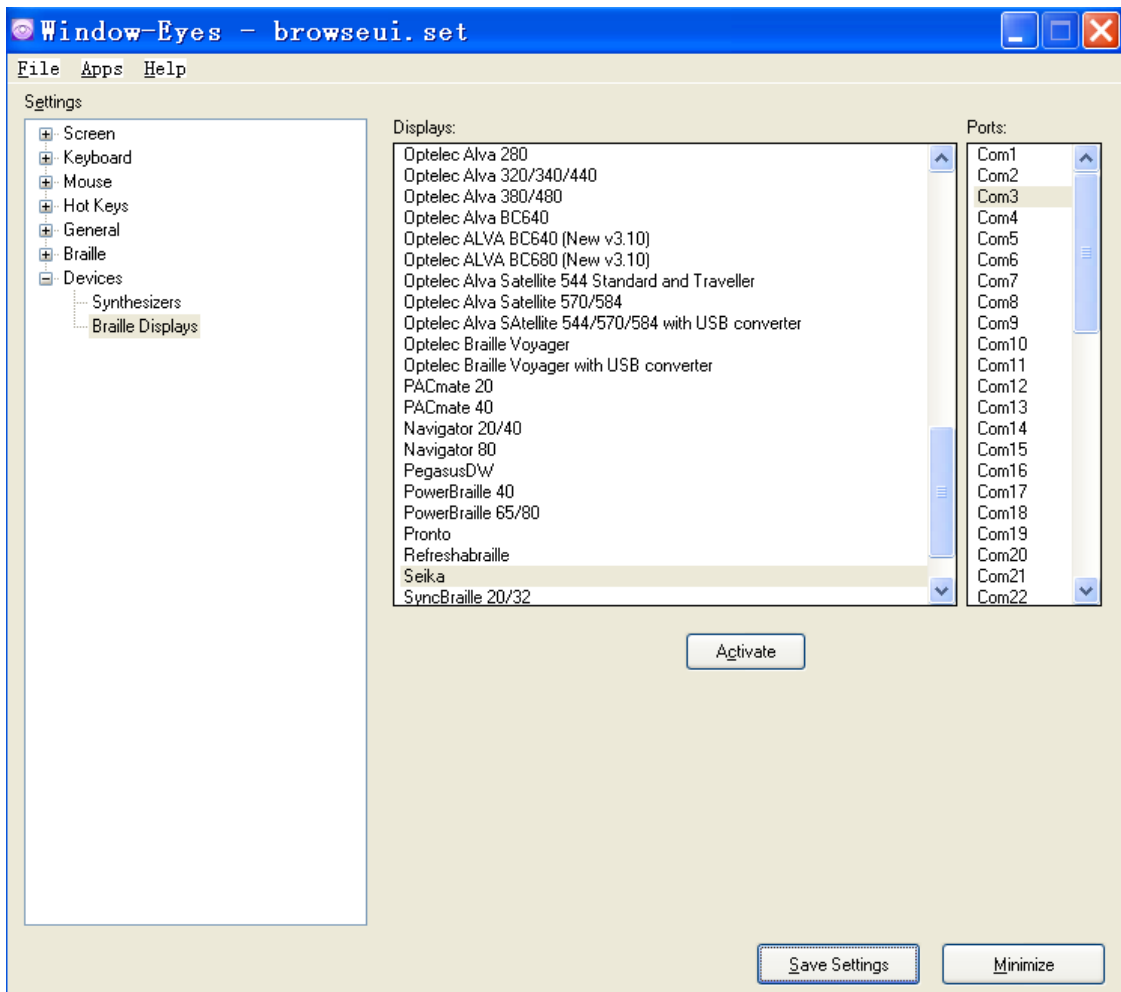
- In “Displays” option, select “Seika” option.
- In “Ports” option, select the Seika COM port number which you remember.



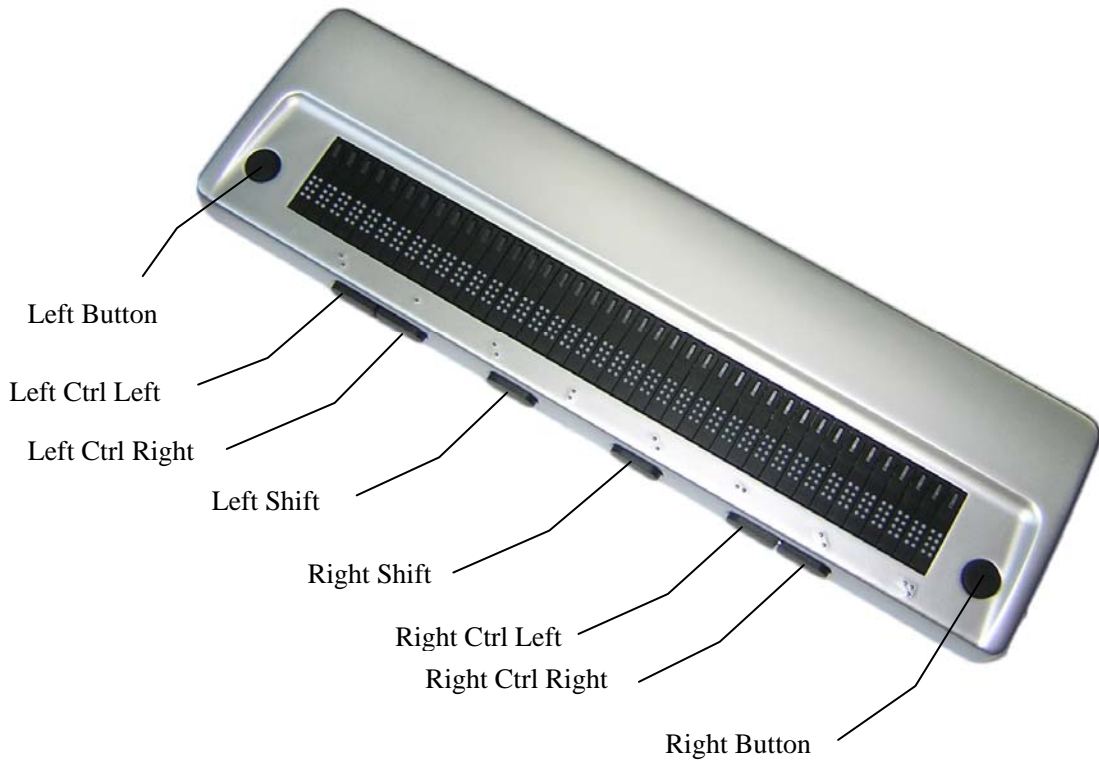
- Tab to the “Activate” button and press Enter.
- Select “Keep Changes” button in the “Braille Settings” dialog box, then press Enter.



- Tab to “Save Settings” button and press Enter.



2. Navigation and Control keys function



Description	Key Press
Scroll Braille Left	Left Button
Scroll Braille Right	Right Button
Prior Braille Line	Left Ctrl Left
Next Braille Line	Left Ctrl Right
Top Line	Right Ctrl Left
Bottom Line	Right Ctrl Right
Mouse Top Left	Left Button + Left Ctrl Left
Mouse Bottom Left	Left Button + Left Ctrl Right
Mouse Top Right	Right Ctrl Left + Right Button
Mouse bottom right	Right Ctrl Right + Right Button
To Focus	Left Button + Right Button
Grade 2 Braille Toggle	Left Shift + Right Shift

Untranslate At Cursor	Left Shift + Right Ctrl Left
Untranslate At Mouse	Left Shift + Right Ctrl Right
Scroll Mode Toggle	Left Ctrl Left + Right Ctrl Left
Spacing Toggle	Left Ctrl Right + Right Ctrl Right
Attributes To Show Rotor	Left Ctrl Left + Right Shift
Show Attributes Toggle	Left Ctrl Right + Right Shift
Quick Message Rotor	Left Ctrl Right + Right Ctrl Left
Display Individual Attribute Rotor	Left Ctrl Left + Left Shift
Braille graphic mode	Left Ctrl Right + Left Shift
Toggle 6/8 Braille	Right Shift
Braille tracking toggle	Left Shift

Chapter 6 –Using Seika Braille Display with HAL and Supernova

(For HAL version 10 and later)

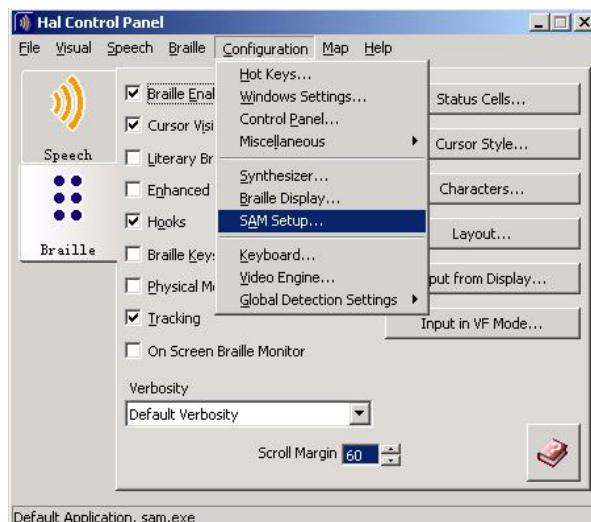
NOTE: The below steps assume that you have already install Seika driver and HAL version 10 or later. If you have not installed Seika driver, please refer to Chapter3.

1. Working in HAL and Supernova

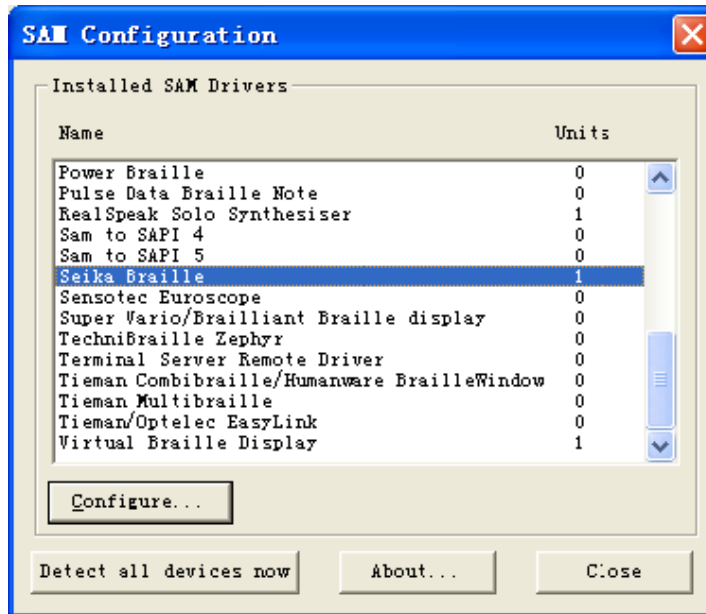
Refer to the “1.1 Configuring HAL Version 10” or “1.2 Configuring Supernova Version 11 and Version 12”.

1.1 Configuring HAL Version 10

- Connect the Seika display.
- Run HAL.
- Open the HAL Control Panel Window.
- Select Configuration.
- Select SAM Set UP.



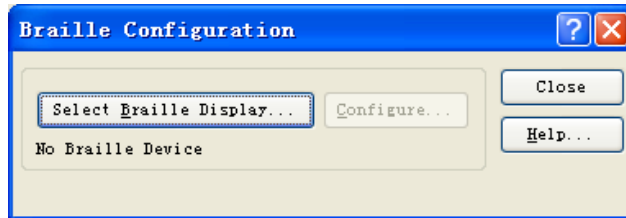
- Select “Detect All Devices now”.



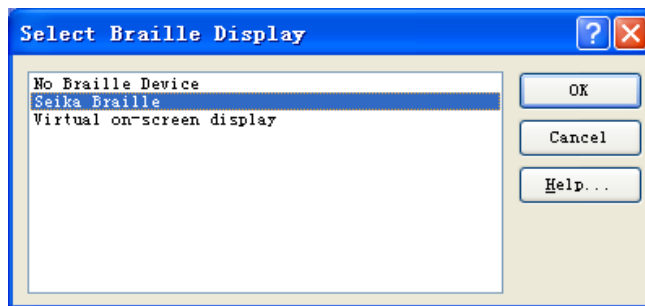
- HAL will automatically detect the Seika Braille.
- Return to the HAL Control Panel Window.
- Select “Braille Display”.



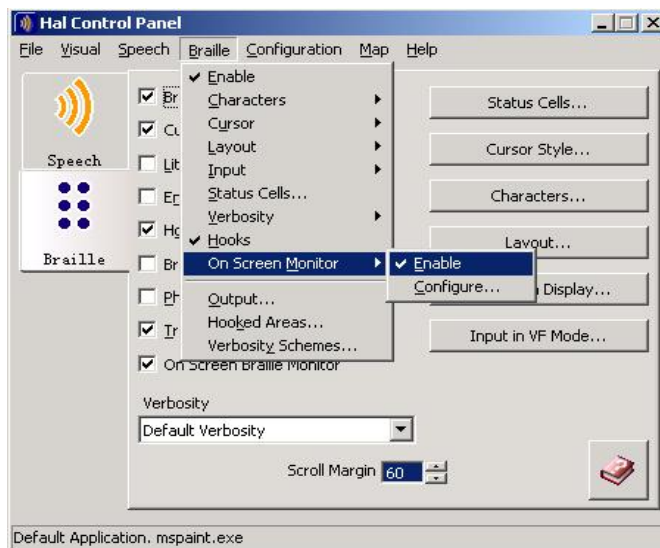
- Click “Select Braille Display”.



- Select the “Seika Braille” from the list and click “OK”.



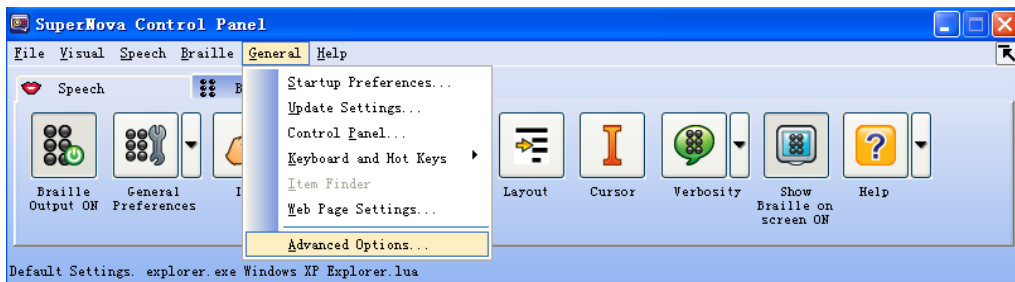
- Return to HAL Control Panel.
- Ensure that the On Screen Monitor is enabled.



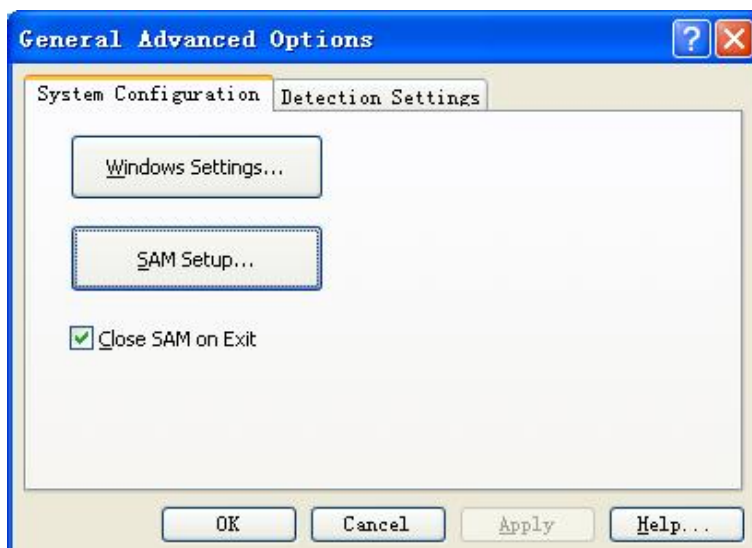
- Restart your HAL.

1.2 Configuring Supernova Version 11 and Version 12

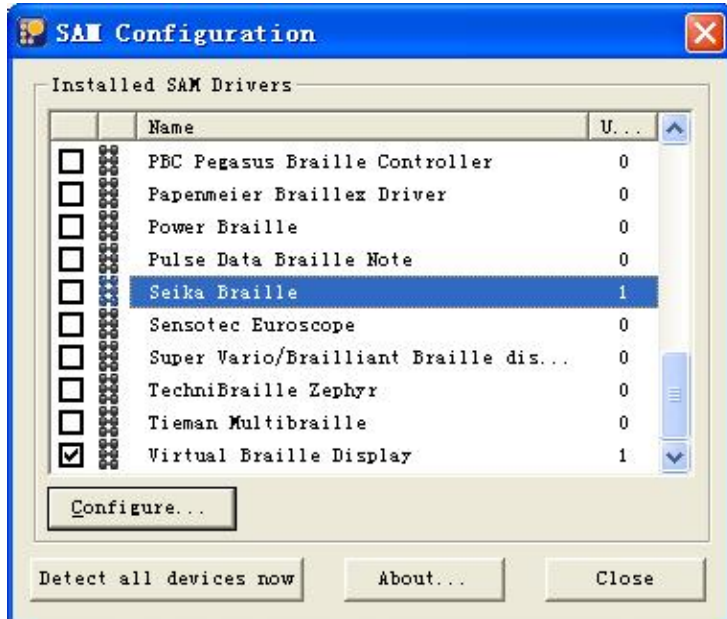
- Connect the Seika display.
- Run the “Detect Seika COM Port V1.0.exe” in the “tool” folder in the CD, remember the Seika COM port number.
- Run Supernova.
- On the “Supernova Control Panel”, select “Advanced Options...” from the menu item “General”.



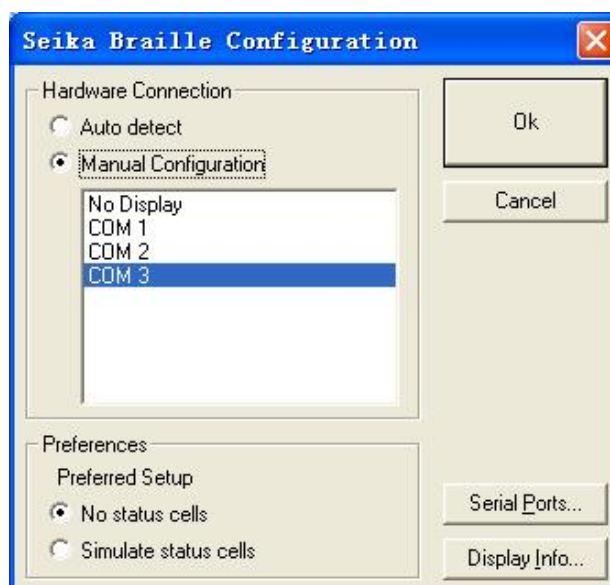
- Select “System Configuration” tab, tab to “SAM Setup...” and press enter.



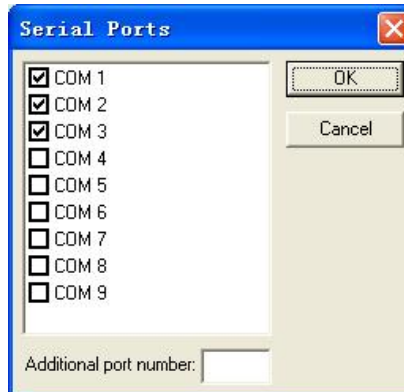
- Check the “Seika Braille” item on the “SAM Configuration” dialog box. Tab to the “Configure...” button and press enter.



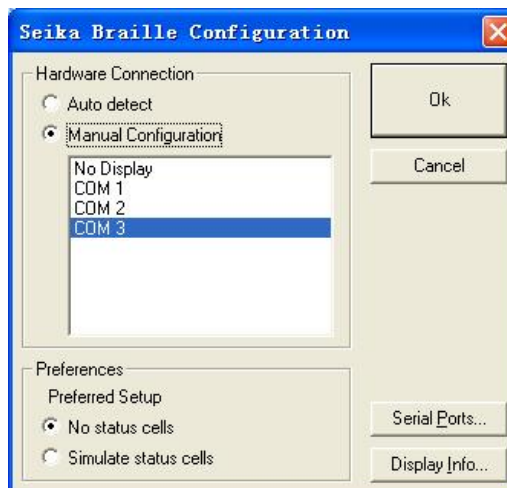
- Select the “Manual Configuration” radio button, tab to the “Serial Ports...” button and press enter.



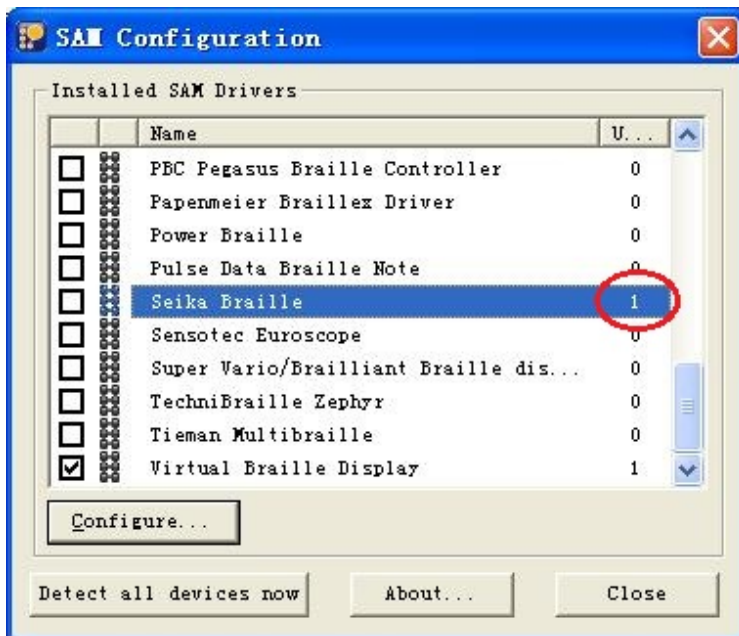
- In the list of COM ports, select the Seika COM port number which you remember and press “OK” button.



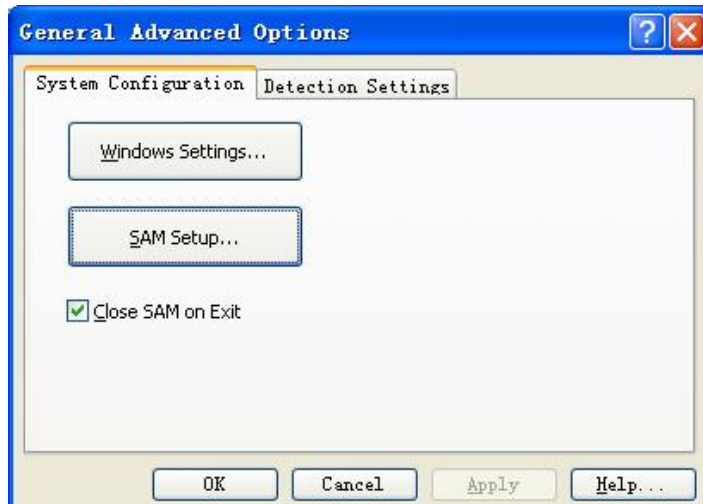
- In the “Seika Braille Configuration” dialog box, select the serial port you have just checked and tab to the “OK” button and press.



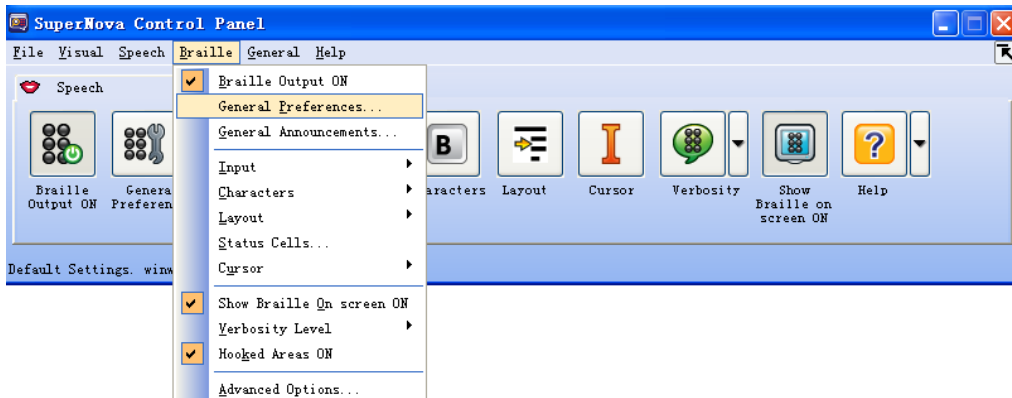
- In the “SAM Configuration” dialog box, the units of the Seika Braille is 1. The Seika Braille connects to the Supernova is successful. Tab to the “Close” button and press enter.



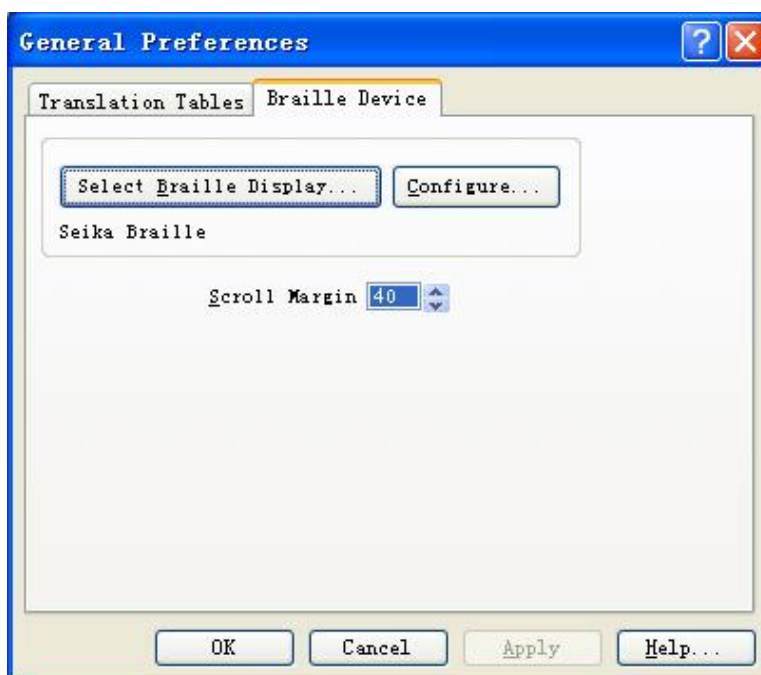
- Tab to the “OK” button and press enter in the “General Advanced Options” dialog box.



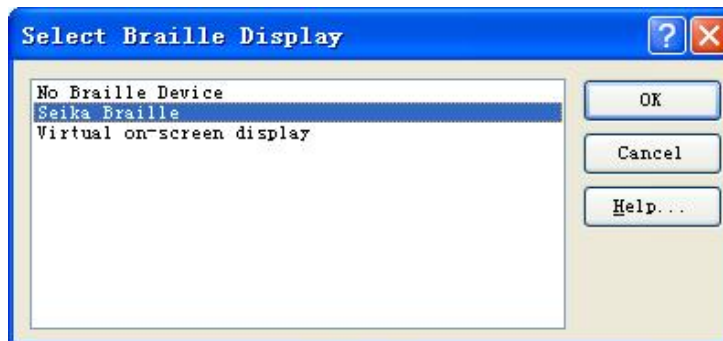
- On the “Supernova Control Panel”, select “General Preferences...” from the menu item “Braille”.



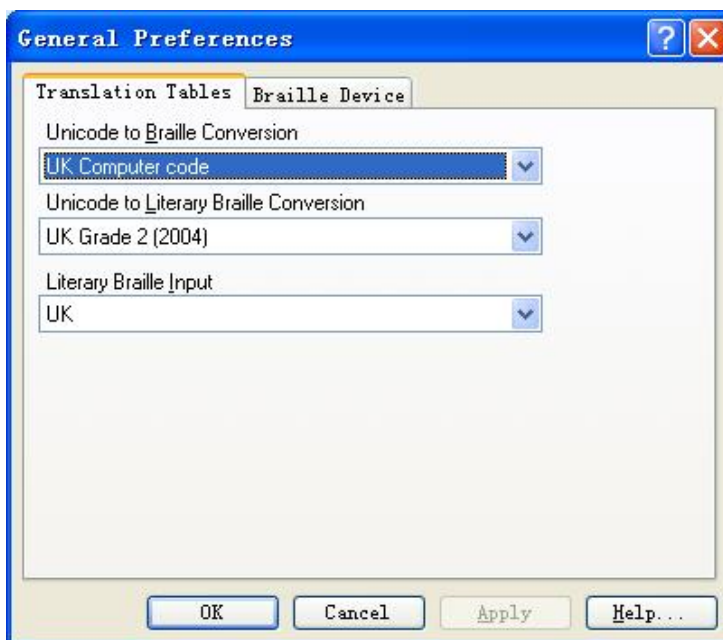
- Select “Braille Device” tab in the “General Preferences” dialog box, tab to the “Select Braille Display” button and press enter.



- Tab to the “Seika Braille” item in the “Select Braille Display” dialog box and press “OK” button.



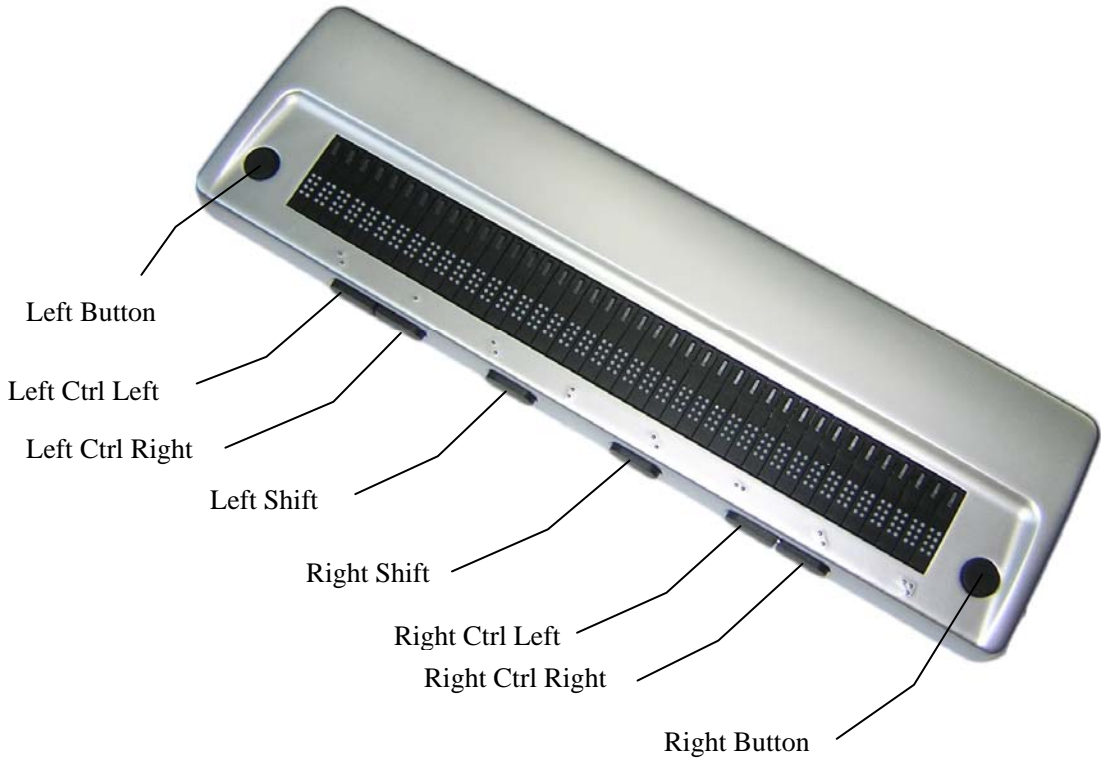
- Select “Translation Tables” tab in the “General Preferences” dialog box. Configure the “Unicode to Braille Conversion”, “Unicode to Literary Braille Conversion” and “Literary Braille Input” according to the local language. Tab to the “OK” button and press enter.



- Restart your Supernova and Seika Braille Display will work now.

NOTE: If you use another model Seika Braille display, please repeat the step of “1.Working in HAL and Supernova”.

2. Navigation and Control keys function



Action	Key press
Braille Back	Left Button
Braille Forward	Right Button
Braille Line up	Right Ctrl Right
Braille Line down	Right Ctrl Left
Braille Go To Focus	Left Shift
Braille Line Start	Left Button + Right Ctrl Right
Braille Line End	Left Button + Right Ctrl Left
Braille Top	Left Button + Left Ctrl Left
Braille Bottom	Left Button + Left Ctrl Right

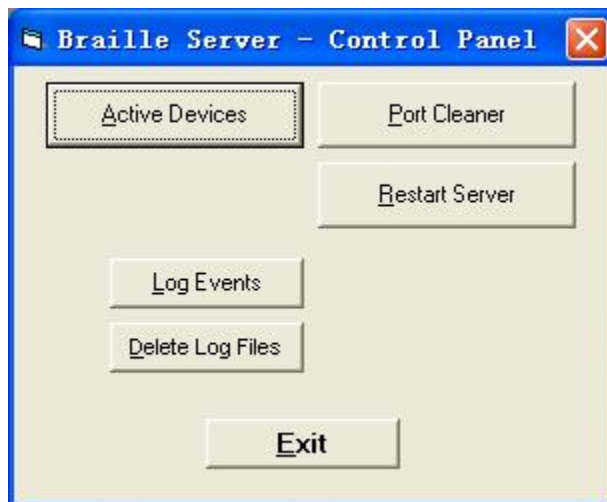
Braille Cell Left	Right Ctrl Right + Right Button
Braille Cell Right	Right Ctrl Left + Right Button
Braille Physical/Logical Mode	Left Ctrl Left + Right Ctrl Right
Braille Cycle Attributes	Left Ctrl Left
Braille Describe Character on off	Left Ctrl Right
Braille Output On Off	Left Ctrl Right + Right Ctrl Left
Braille tracking on off	Right Shift

Chapter 7 – Using Seika Braille Display with COBRA

NOTE: The below steps assume that you have already install COBRA and Seika driver. If you have not installed Seika driver, please refer to Chapter3.

1. Configuring COBRA

- Connect the Seika display.
- Run the “Detect Seika COM Port V1.0.exe” in the “tool” folder in the CD, remember the Seika COM port number.
- Start COBRA by pressing left CTRL+ALT+Shift+F7.
- From the Start Menu, select Programs, BAUM Retec, Braille Server, then “Control Panel”.



- Select “Active devices”.

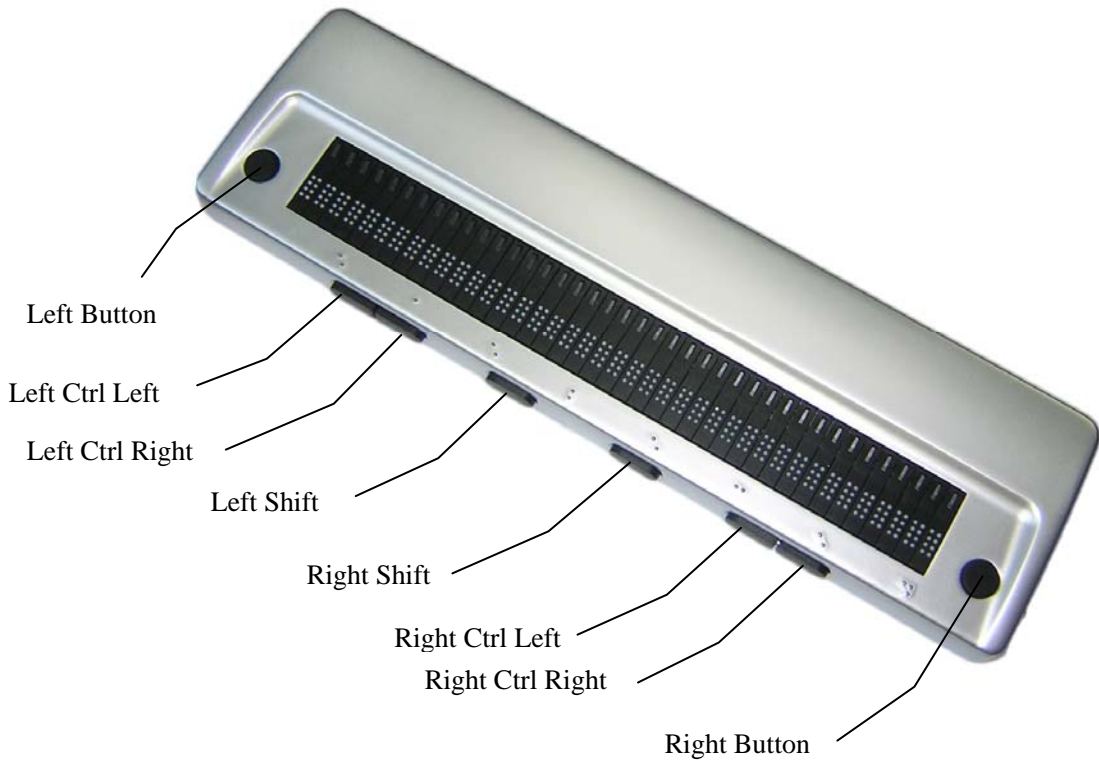


- click on “Add device”.



- Select the desired display from the list and type the port to which you remember.
- Click on “OK” to reboot the Braille Server.
- Please also reboot COBRA, so that it can recognize the new Braille display.
- Start COBRA by pressing left CTRL+ALT+Shift+F7 again. This combination must be held for at least one second.

2. Navigation and Control keys function



Action	Key press
Scroll left	Left Button
Scroll right	Right Button
Previous item or up screen	Left Ctrl Left
Next item or down screen	Left Ctrl Right
Shift + Tab	Right Ctrl Right
Tab	Right Ctrl Left
Move navigation to focus	Left Shift
Focus is in element mode	Left Button + Left Ctrl Left
Focus is in line mode	Left Button + Left Ctrl Right
Navigation is in line mode	Left Button + Right Ctrl Left
Navigation in element mode	Left Button + Right Ctrl Right
Move navigation to the top	Left Ctrl Left + Right Ctrl Right
Move navigation to the bottom	Left Ctrl Right + Right Ctrl Left
Escape	Left Ctrl Left + Right Button
Enter	Left Ctrl Right + Right Button

Chapter 8 – Using Seika Braille Display with NVDA

1. Configuration of BRLTTY

Before using Seika Display with NVDA, please install BRLTTY (for windows) and configure BRLTTY as follows:

- Make sure that Seika Display driver has been installed successfully and Seika Braille Display has been connected with your computer.
- Run the “Detect Seika COM Port V1.0.exe” in the “tool” folder in the CD, remember the Seika COM port number.
- Double click “brltycnf.exe” to chose “Seika” at Braille display list.
- In the COM port list, select the Seika COM port which you remember.
- Click OK button to save and exit.
- Double click “install.bat” to install BRLTTY service.
- You will hear beeps when BRLTTY starts to work successfully as system service and Braille Display will update display. If not, please reboot computer with connecting display and “brlty.exe” will run automatically.

2. Configuration of NVDA

To use Seika Display with NVDA through brlty, please configure NVDA as follows:

- Run “nvda.exe”, select “preference”, and select “Braille settings”.
- Select “brlty” at Braille display list, click OK to save and exit.

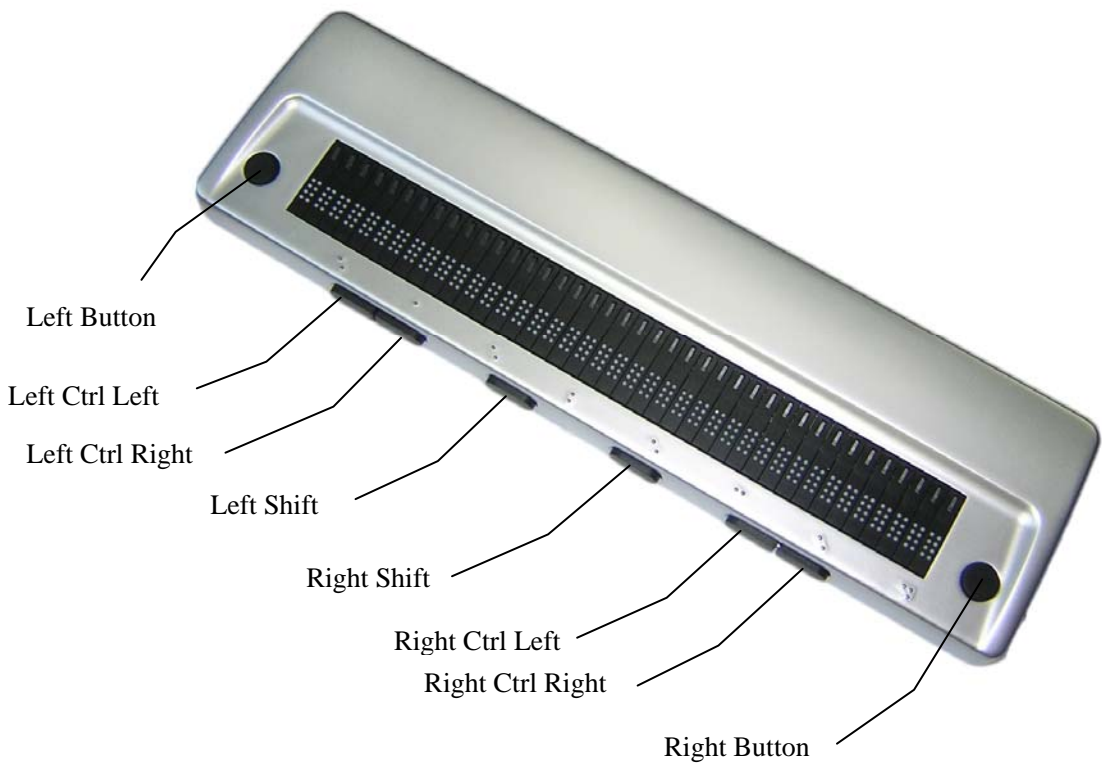
3. Reconnection

For any reconnection needs, please reboot computer or configure Brlty

as follows:

- Run “uninstall.bat” to uninstall service.
- Do the same as Configuration of BRLTTY.

4. Navigation and Control keys function



Description	Key Press
Scroll Braille Left	Left Button
Scroll Braille Right	Right Button
Braille Prior Line	Left Ctrl Left
Braille Next Line	Left Ctrl Right

Chapter 9 - Display Specifications

Display system	8 dots Braille
Display capacity	40 cells
Navigation and Control keys	8 Control keys
Touch cursor key	40 keys
Character code	original code
Interface	MiniUSB
Power supply	bus power
Size	12.99(W) x 3.58(D) x 0.98(H)inches
Weight	600g

Q&A

1. How to verify which Virtual COM port has been used by Seika Braille Display

- Run “Detect Seika COM Port V1.0.exe” in the “tool” folder in the CD.
- Seika COM port number will be displayed.

2. How to uninstall the Seika Braille display driver

Open the “Add or Remove Programs” in your Windows operation system, select and remove the item “Silicon Laboratories CP210x USB to UART Bridge”

NOTE: For the old version of Seika driver, select and remove the item according to the following different Windows operation system.

XP: ”CP210x USB to UART Bridge Controller”

Win7 32/64bit: ”Seika Braille Display System Driver (Driver Removal)”

Vista 32/64bit: ”Seika Braille Display (Driver Removal)”

3. Braille display doesn't work

If the Seika Braille display doesn't work, please check Seika Braille display driver and also the screen reader setting.

3.1 Check Seika Braille display driver

- Right click the icon of “My Computer” on desktop, and select “Properties”.

- Select “Hardware” on the top menu, and click the button “Device Manager”.

If there is a yellow interrogation marks before both the item “Other Device” and its subdirectory “Silicon Labs CP210x USB to UART Bridge” in the catalog, it would mean that Seika Braille display driver doesn't work. It is necessary to reinstall the driver.

- Right click “Silicon Labs CP210x USB to UART Bridge”, and select “uninstall”.
- Install the Seika Braille display driver again (refer to Chapter 3).

3.2 Check the screen reader configuration

Run the “Detect Seika COM Port V1.0.exe” in the “tool” folder in the CD, remember the Seika COM port number. Check the COM port setting in your screen reader.