User Manual

Artisul LCD Sketch-Pad | Model: SP1603

Windows and Macintosh

ARTISUL

Notice

1. Please read this manual carefully before you use the pen display, and keep it well for future reference.
2. Before cleaning the pen display please unplug the power cable and wipe the screen with a soft damp cloth. No detergents are suggested.
3. Keep the pen display and digital pen away from liquids or places near water such as the bath, basin, kitchen sink, washing machine, damp basement, and swimming pool etc. Take care not to spill liquids onto the pen display, digital pen, power cable, or power adapter.
4. Do not put your pen display and digital pen on an uneven surface in case they fall from a high place and get damaged.
5. Put the pen display, digital pen, the power cable, and power adapter in places beyond the reach of children to keep them safe.
6. When using the pen display and digital pen you should place them from magnetic field to avoid interference.
7. Only power supplies meeting the requirements on the nameplate can be used for the display. If you have questions about the power supply that you are using, please consult the retailer.
8. Turn off your pen display when it is not in use. Unplug the power cable if you don't use the display for a long time or during a power outage.
9. Do not overload the socket or extend the power cable. Otherwise it is easy to cause fire or electric shocks.
10. Do not put anything that is not any part of the device into the pen display in case the display is in contact with any high voltage or a short circuit in the components occurs, resulting in electric shocks or fires.
11. If the pen display breaks down, ask a qualified repair technician for help rather than disassemble the display by yourself.
12. Please unplug the power cable from your pen display and ask a qualified maintenance technician to fully repair it in the following situations:
    A. The power cable and plug are damaged or broken.
    B. The pen display is exposed to rain and water or other liquids get into you display.
    C. The pen display falls down and gets damaged; the display case is broken; dust or something else has entered your display.
    D. There are unusual pen display errors which can not be fixed after referring to this user manual.
13. If you need to change some parts of your pen display, please use authorized ones because unauthorized components may cause fire, electric shocks, or other dangers easily.

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1. Product Overview

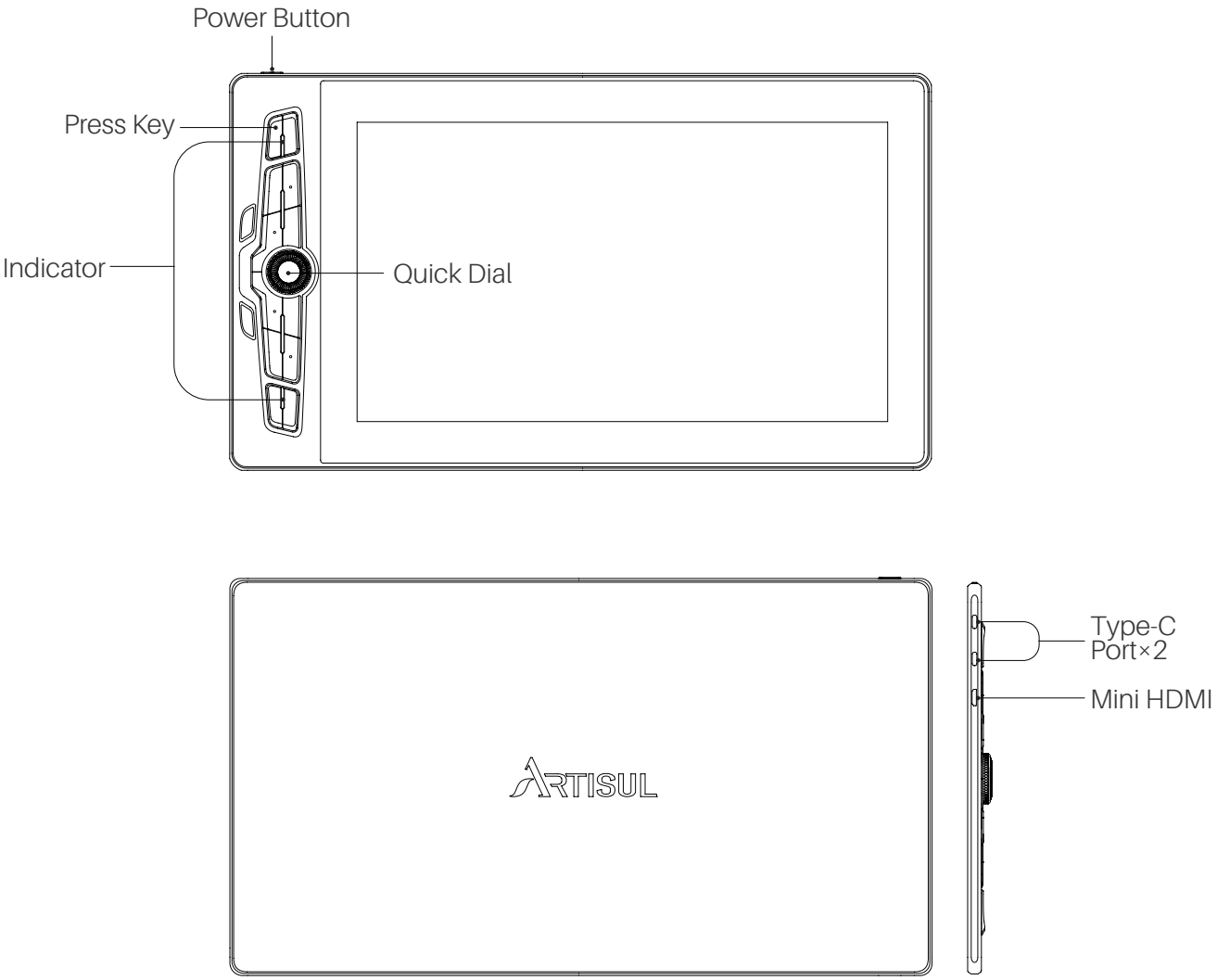
1.1 Product Introduction

Thanks for choosing Artisul® SP1603 Pen Display. As a professional pen display, SP1603 enables you to enjoy drawing and creating with great efficiency. With this pen display, you can freely write and draw, making lines varied in width, painting pictures in different shades of colors, and gaining an amazing pen-on-paper experience.

To better understand and use this product, please read this user manual carefully. It shows how to use Artisul® SP1603 when you connect it to a computer running Windows operating system. It is also applicable to computers running Mac operating system unless a special note is given out.

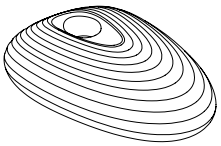
1.2 Product and Accessories

1.2.1 Pen Display



1.2.2 Accessories

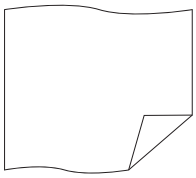
Digital Pen



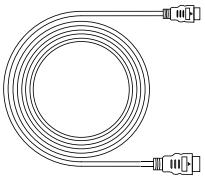
Pen Holder

X 38

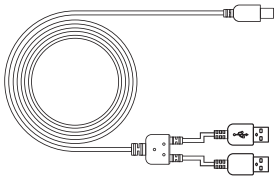
Pen Nibs



Cleaning Cloth

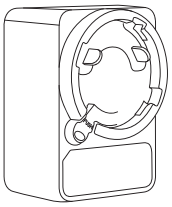


HDMI Cable

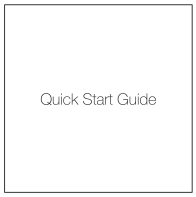


2-in-1 Cable

Pen Case



Power Adapter

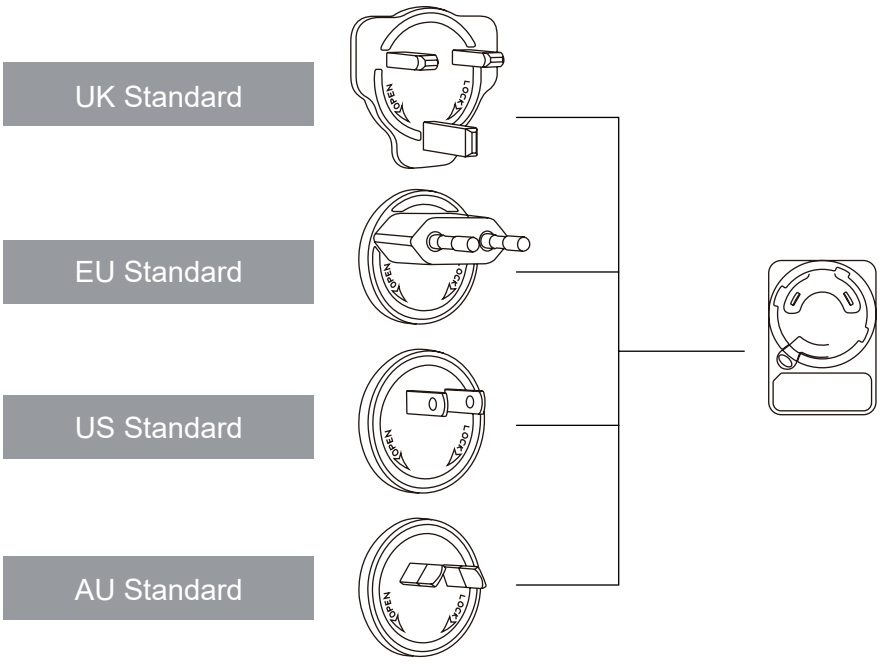


Quick Start Guide

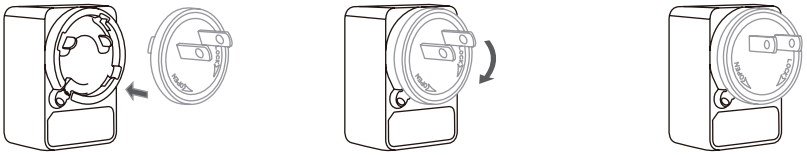
Warranty Card

1.2.3 Power Adapter

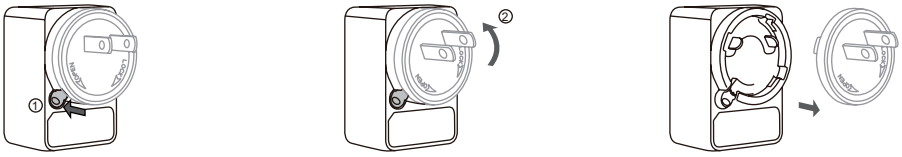
Pick right plugs which are used in your country or region and fit the power adapter with it (The included plug differs from country to country)



Assemble



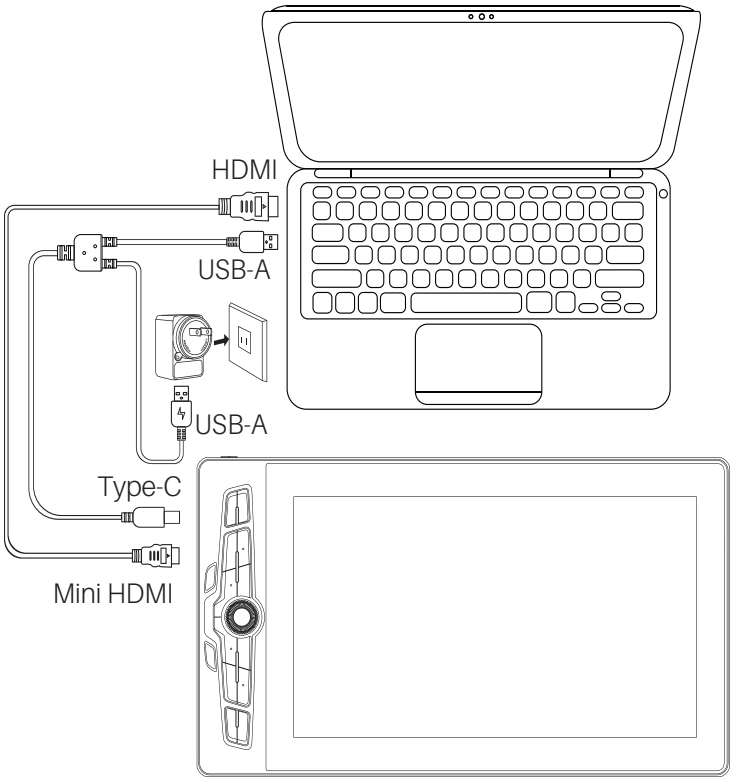
Disassemble



1.3 Connection

1.3.1 Connect to a computer via an HDMI cable

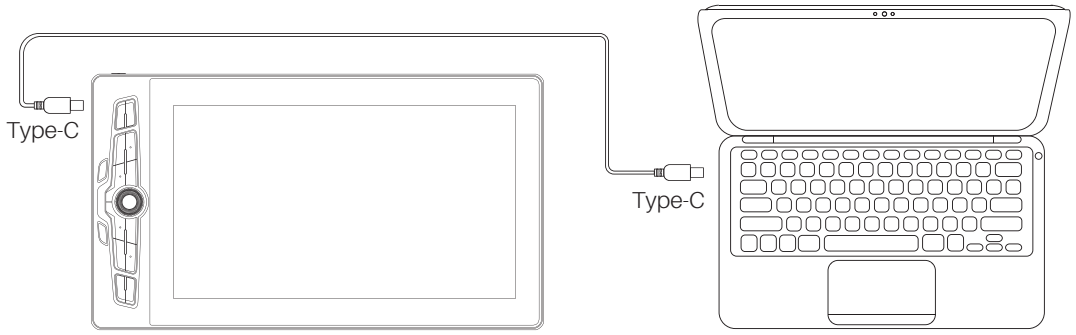
1. Connect the pen display to a computer via an HDMI cable.
2. Connect the display to your computer via a 2-in-1 cable, with the Type-C end inserted to pen display, black USB-A end to the computer, and the red USB-A end to the power adapter (You can also use a Type-c cable to connect the power supply and the computer instead).
3. Once correctly connected, SP1603 will start up automatically.



1.3.2 Connect to a computer via a full-featured USB-C to USB-C cable

You can connect the pen display to a computer via a full-featured USB-C to USB-C cable if your computer has a full-featured Type-c port.

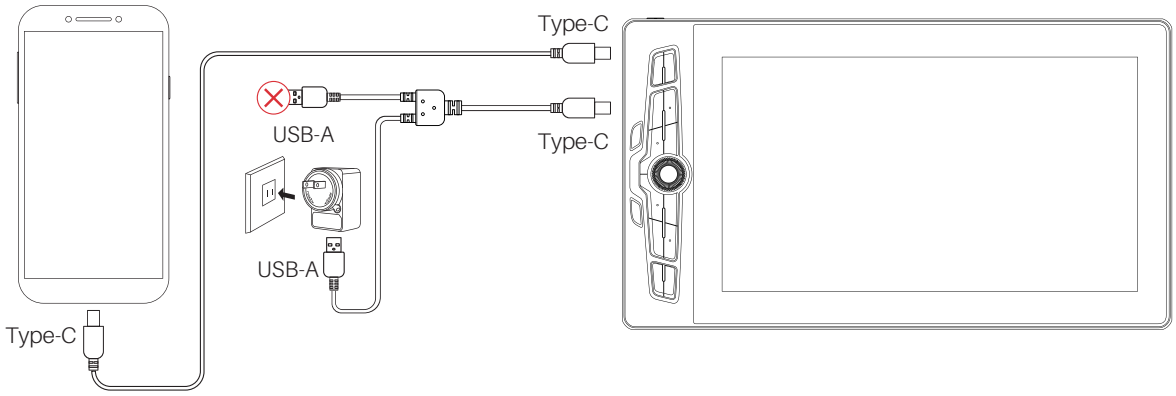
Note: The pen display may restart because the output voltage of the full-featured Type-c port in the computer is low. In this case please connect your display to the power supply via a 2-in-1 cable first, then connect the display to your computer via a full featured USB-C to USB-C cable (You only need to plug the red USB-A connector to the power adapter and let the black one alone, otherwise the pen display can not be detected).



*The full-featured USB-C to USB-C cable is not included in the package. Users can buy one separately,but make sure the full-featured USB-C to USB-C cable at least USB3.1 GEN1 data transfer protocol & DP1.2 and the output is at least 5V, 2A. If it cannot be used normally,an external power supply is required.

1.3.3 Connect to a phone via a full-featured USB-C to USB-C cable

1. Plug the red USB-A connector of the 2-in-1 cable to the power adapter and insert the Type-c end to your pen display. Then connect the display to your phone via a full-featured USB-C to USB-C cable.
2. You can also use a Type-c cable with a USB-C PD adapter to provide power for the display instead of the 2-in-1 cable.



*The full-featured USB-C to USB-C cable and USB-C PD adapter are not included in the package. Users can buy them separately,but make sure the full-featured USB-C to USB-C cable and USB-C PD adapter at least USB3.1 GEN1 data transfer protocol & DP1.2 and the output is at least 5V, 2A.

1.4 Driver Installation

1.4.1 OS Support

Windows 7 or later, macOS 10.12 or later

1.4.2 Install Driver

Please download the driver from our website :

https://www.artisul.com/downloads/

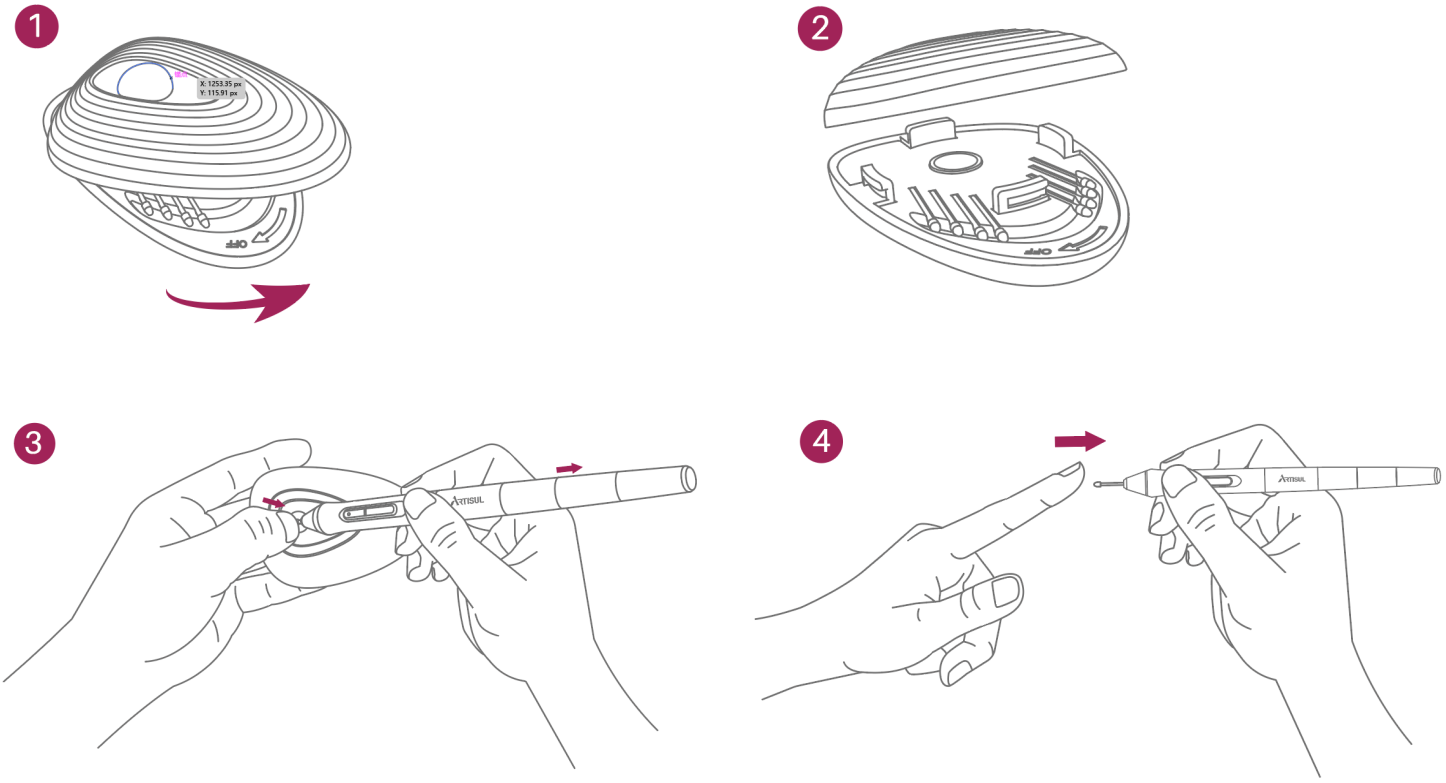
to the computer. When the installation is finished successfully, you can find the driver icon in system tray. Connect the device to your computer and the icon turns into , showing that the driver has detected the device and now you can use it.

Note :

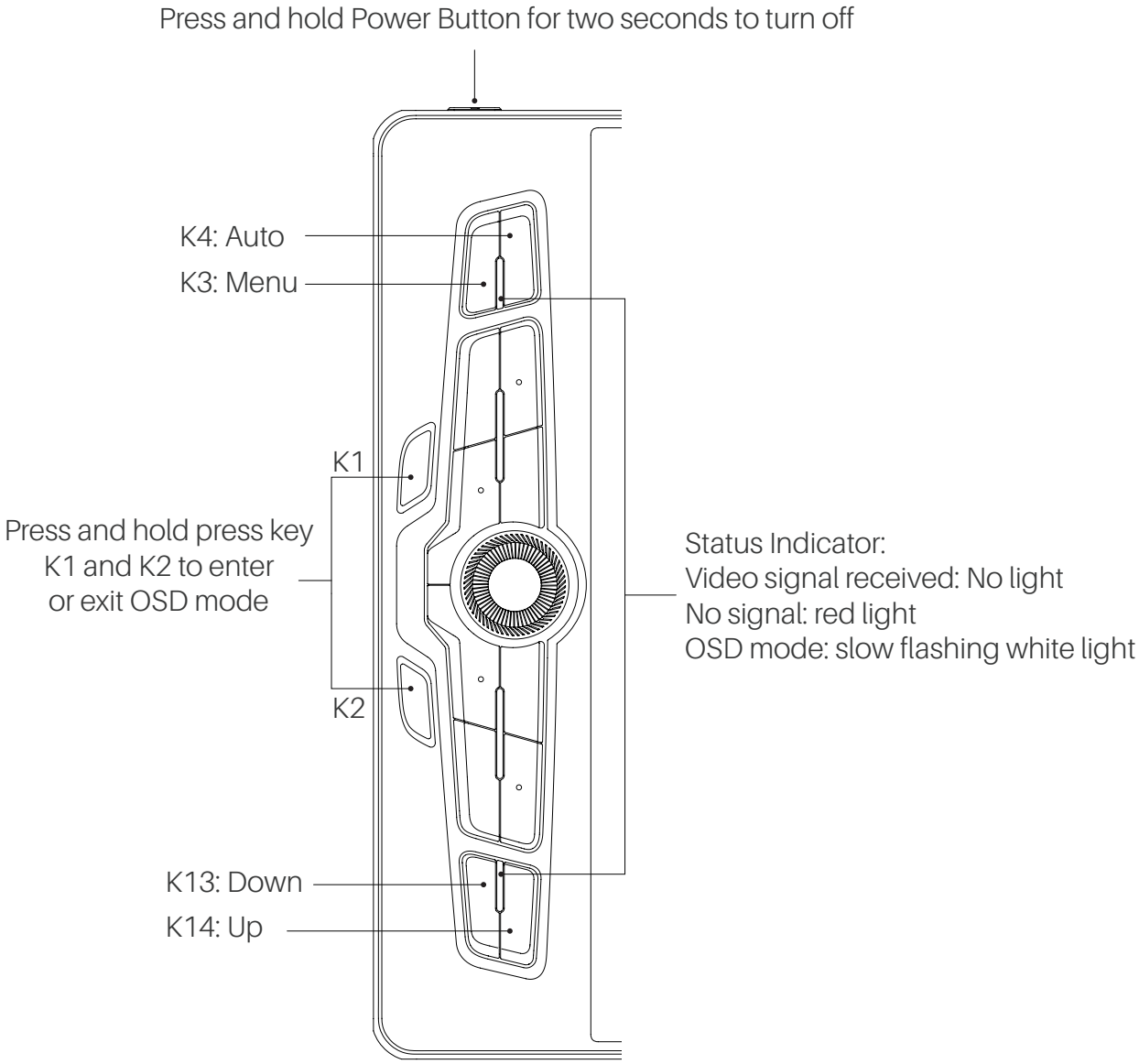
1. All existing drivers for a pen display (including the previous version of this driver) should be removed before installing the driver mentioned above.
2. Before installing the above driver, please close all graphics software and anti-virus programs to avoid mistakes.

1.5 Pen Nib Replacement

Please replace the worn nib with a new one after using it for a long time.



1.6 OSD Settings



The default functions of the four keys: Menu, Auto, Up, and Down in OSD mode：

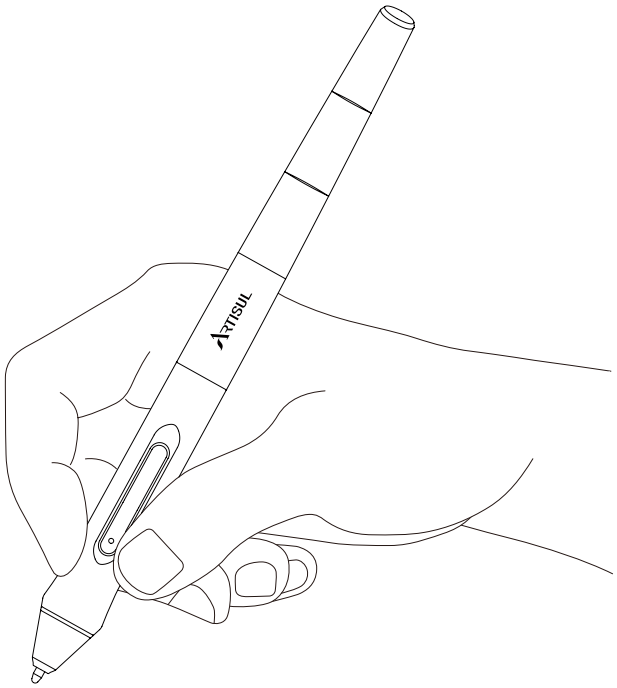
Default Press Key	Functions of the four keys in OSD mode	
K3	Menu	Main Menu, Confirm
K4	Auto	Back to the previous menu, till exit
K13	Down	-, increase, page up
K14	Up	+, decrease, page down

2. How to Use Digital Pen

2.1 Digital pen

2.1.1 How to hold the pen

Hold the digital pen as you hold a real pen. Adjust your grip so that you can toggle the pen buttons easily with your thumb or index finger. Be careful not to accidentally press the button while drawing with the pen.

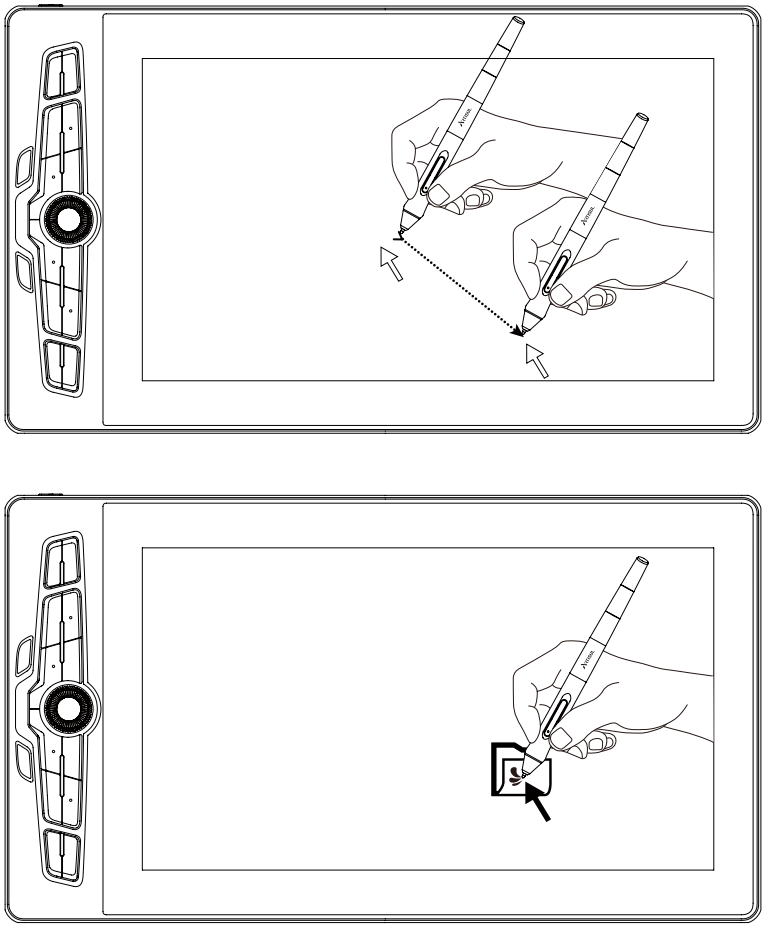


Note :

When the digital pen is not in use, please place it on the table steadily to prevent it from falling down, which may cause damage to the pen.

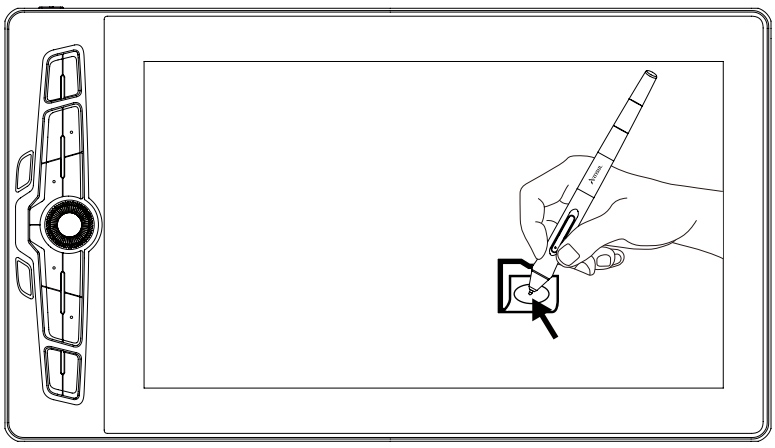
2.1.2 Cursor Movement

Move the pen slightly above the working area of the screen without touching the surface of pen display, and the cursor on the screen will move to the new position accordingly. Tap the screen with the pen nib to select a program.



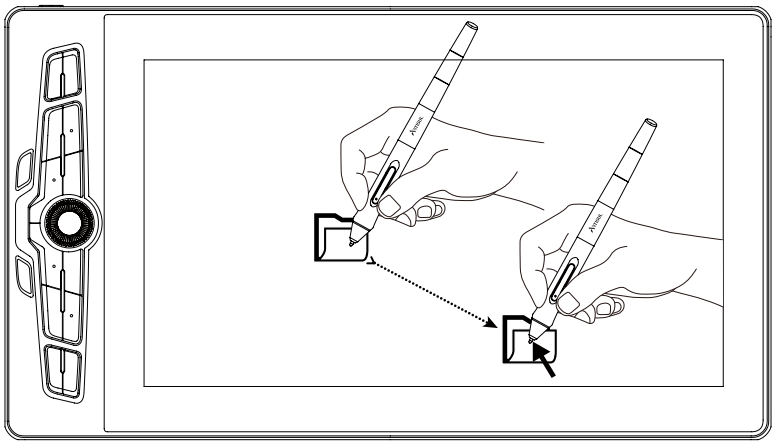
2.1.3 Click

Select a program with the digital pen and double-click on the item to open it.



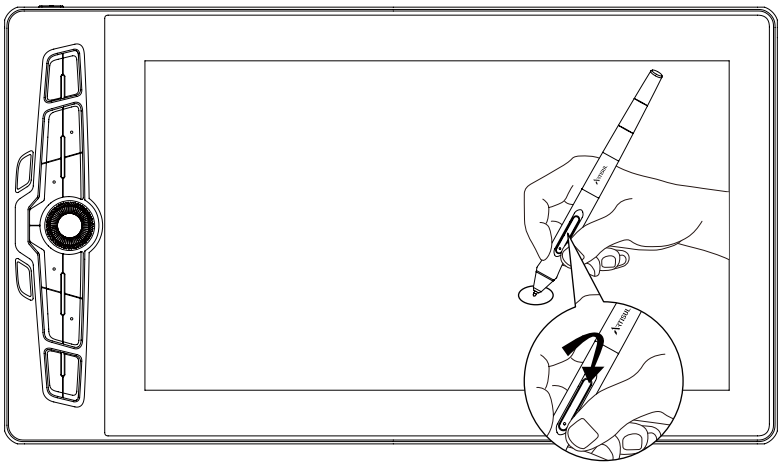
2.1.4 Move

Pick up an item on the screen, then slide the pen nib across the display to move it.



2.1.5 How to Use the Pen Buttons

There are two customizable buttons on the digital pen. The buttons on the pen will work as long as the vertical distance between the pen nib and the screen is within 10mm.

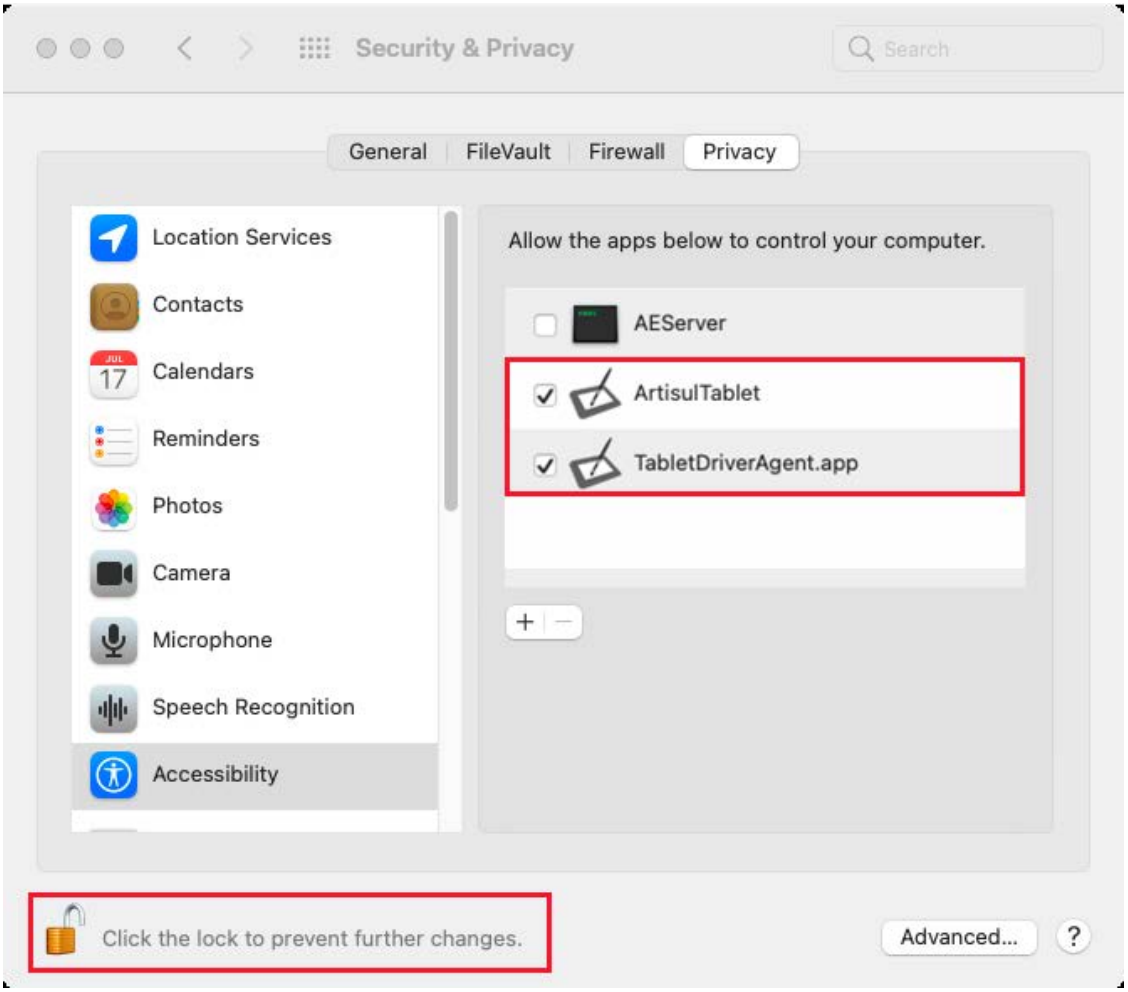


3.Mac Whitelist Settings

1. Put the downloaded driver into “Applications”.

2. Click “Applications” and then open the driver.

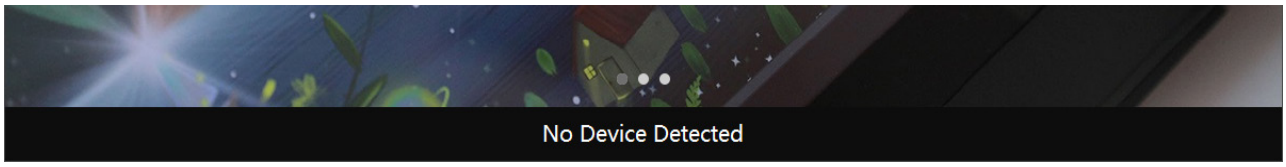
3. Use the digital pen to tap on the screen of the pen display and the “Accessibility Access” pop-up window appears. click “Open System Preferences”. Go to “Security & Privacy” and click “Privacy”. Click the lock icon to unlock the settings. Then enter your username and password. Tick the checkbox on the left of the driver to enable it and you can use the device.

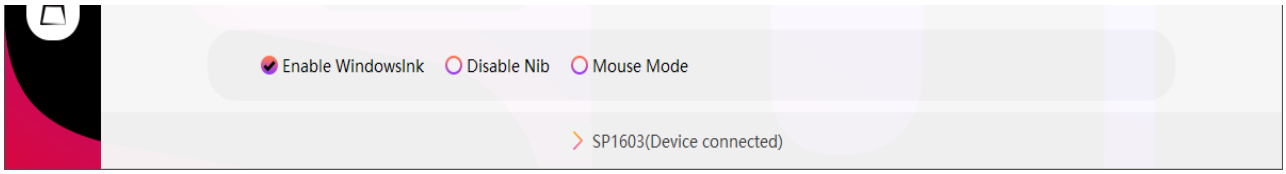


4. Driver Settings

4.1 Device Connection Notification

1. No Device Detected: The device can not be identified by the computer.
2. Device Connected: The device is identified by the computer.





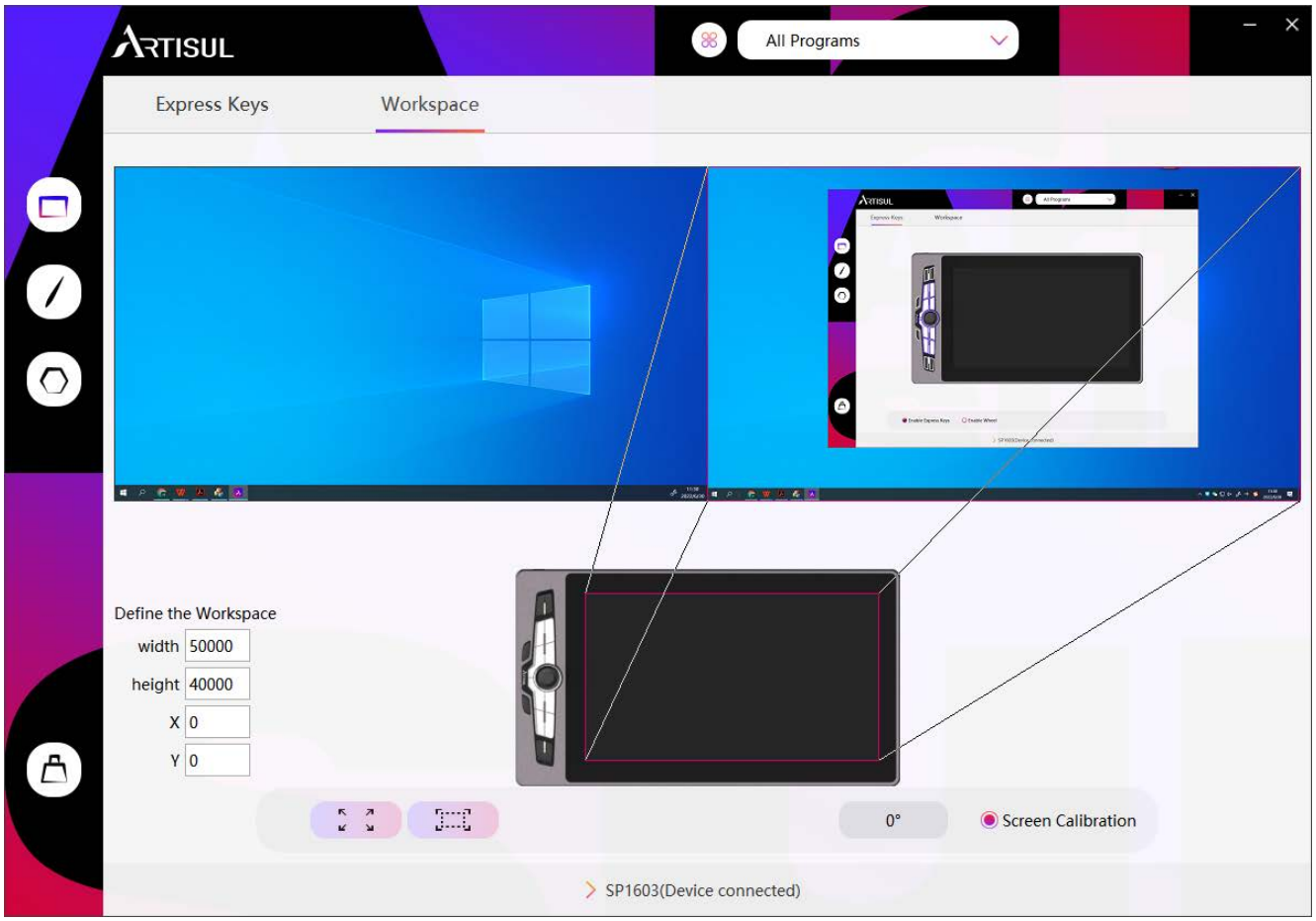
4.2 Working Area

4.2.1 Multiple Monitors Connected to a Computer

When the pen display is in use with a computer/all-in-one PC/other monitors, you can set the area that the cursors can move on the screens in the driver.

By default, the entire active area of the pen display maps to the whole monitor. If more than one monitor is in use and they are in extended mode, users need to choose one that will be mapped to on the driver interface and the other ones as the external displays.

In mirror mode (All monitors display the same content), the pen display maps to the entire screen on each monitor and cursors move simultaneously on the pen display and monitors.

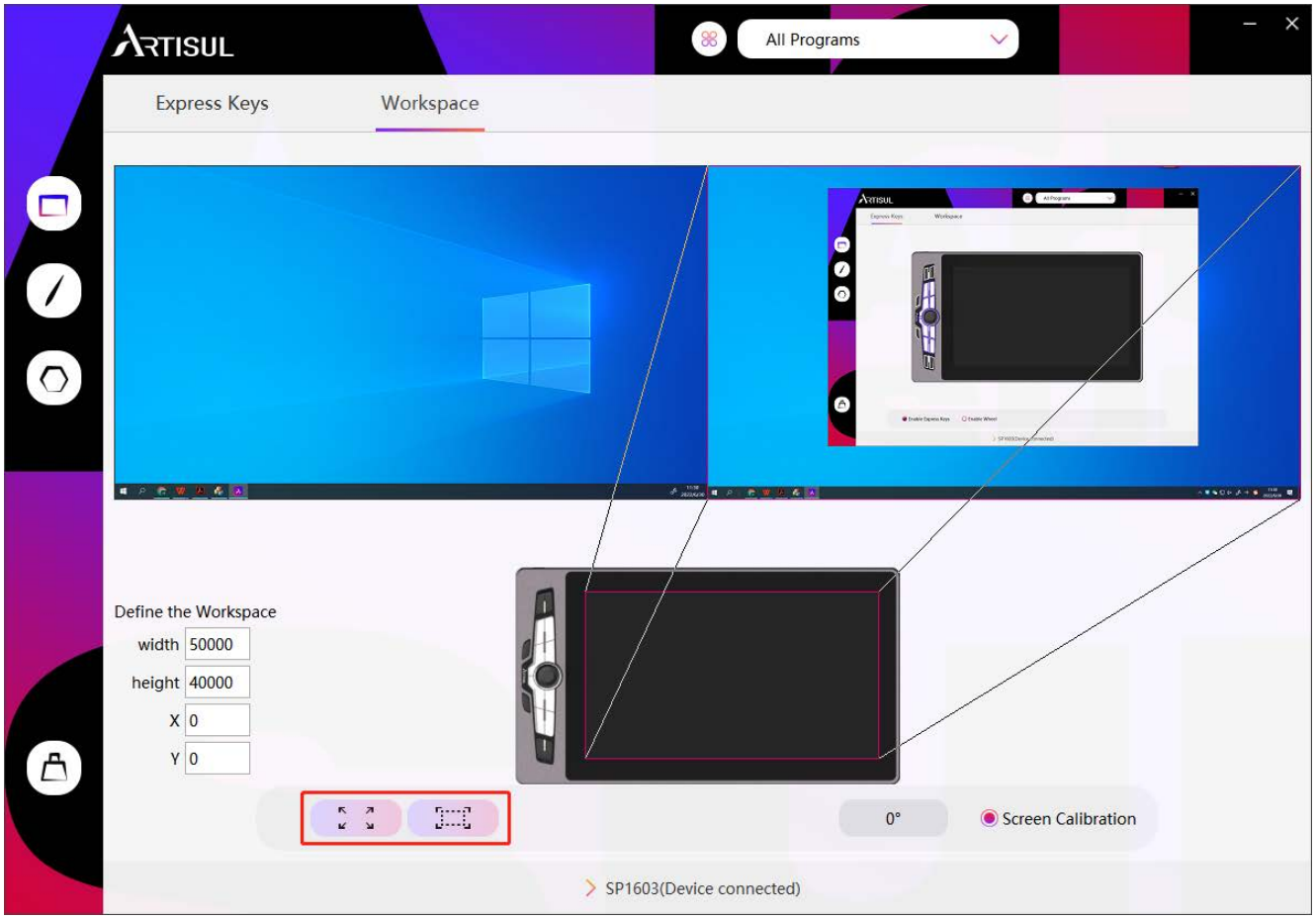


4.2.2 Set Working Area

Select the working area of your pen display which can be mapped to the monitor.

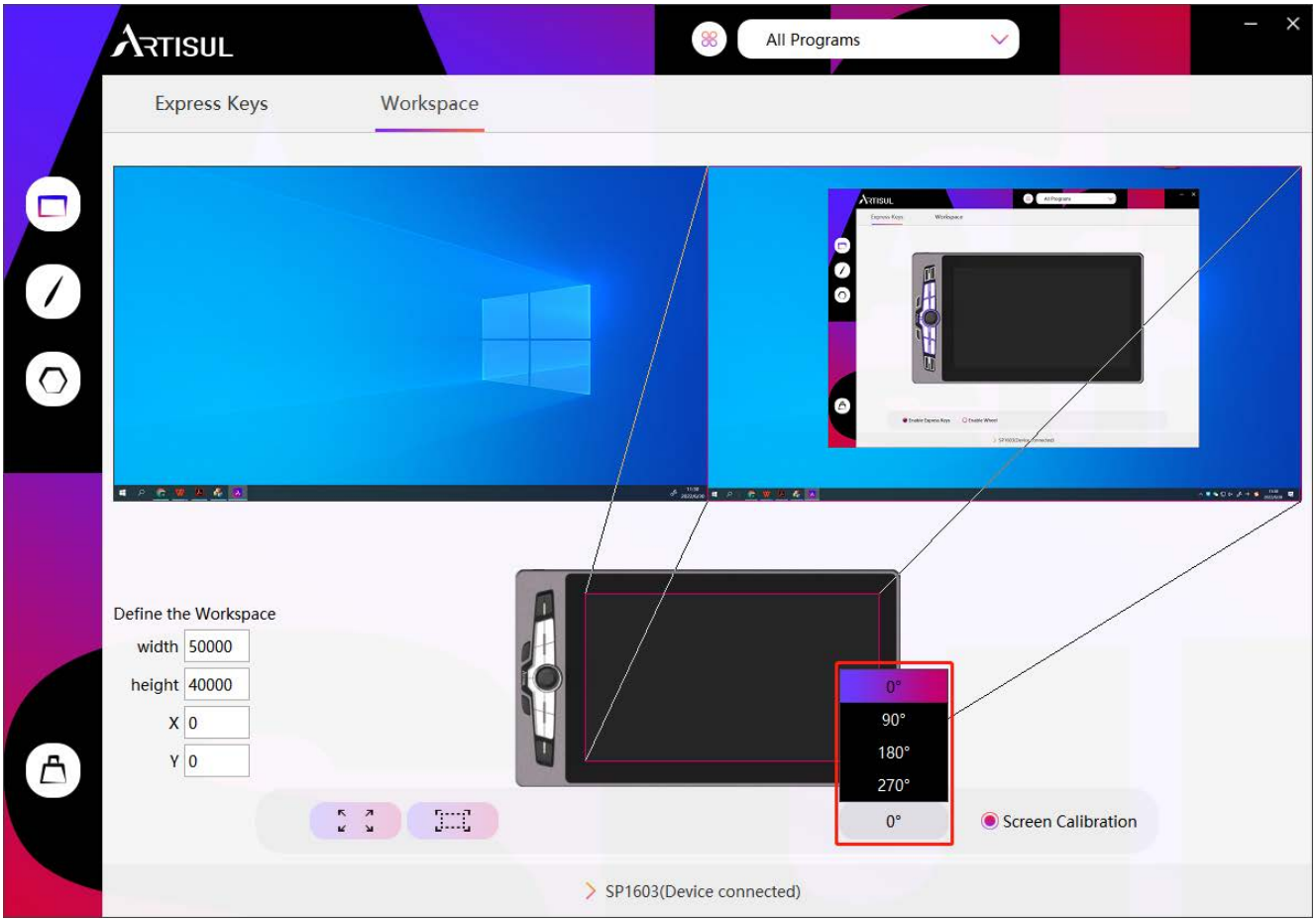
1. Full Area: The entire active area of the pen display will be mapped to the monitor. It is the default setting.

2. Custom Area: Users can drag the two red rectangles to select the active areas of the digital pen on the monitor and the pen display. (Please see the picture below).



4.2.3 Rotate Working Area

Both left-handed and right-handed users can freely use the pen display and place it either way because the working area can be rotated by 0°, 90°, 180°or 270°.

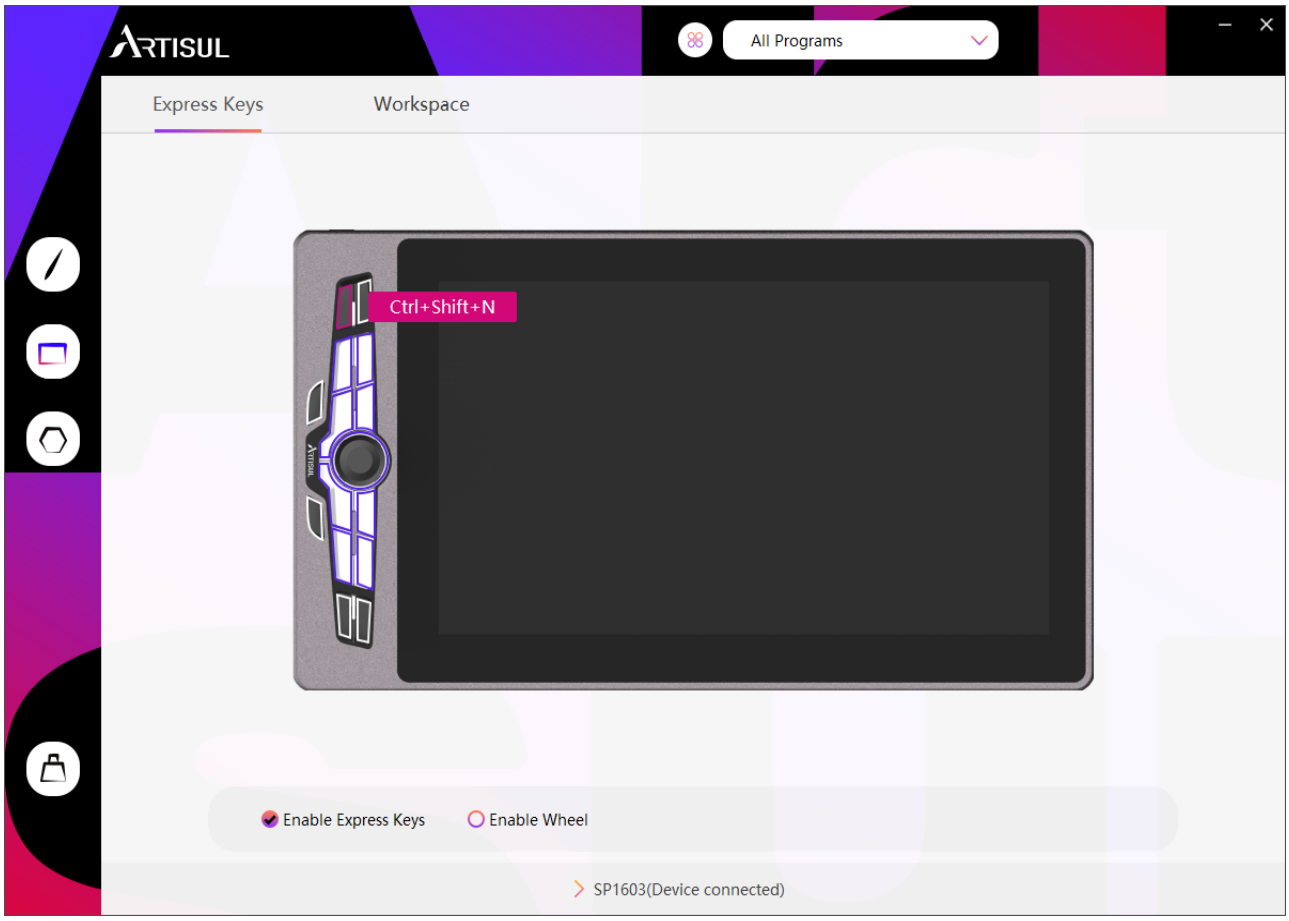


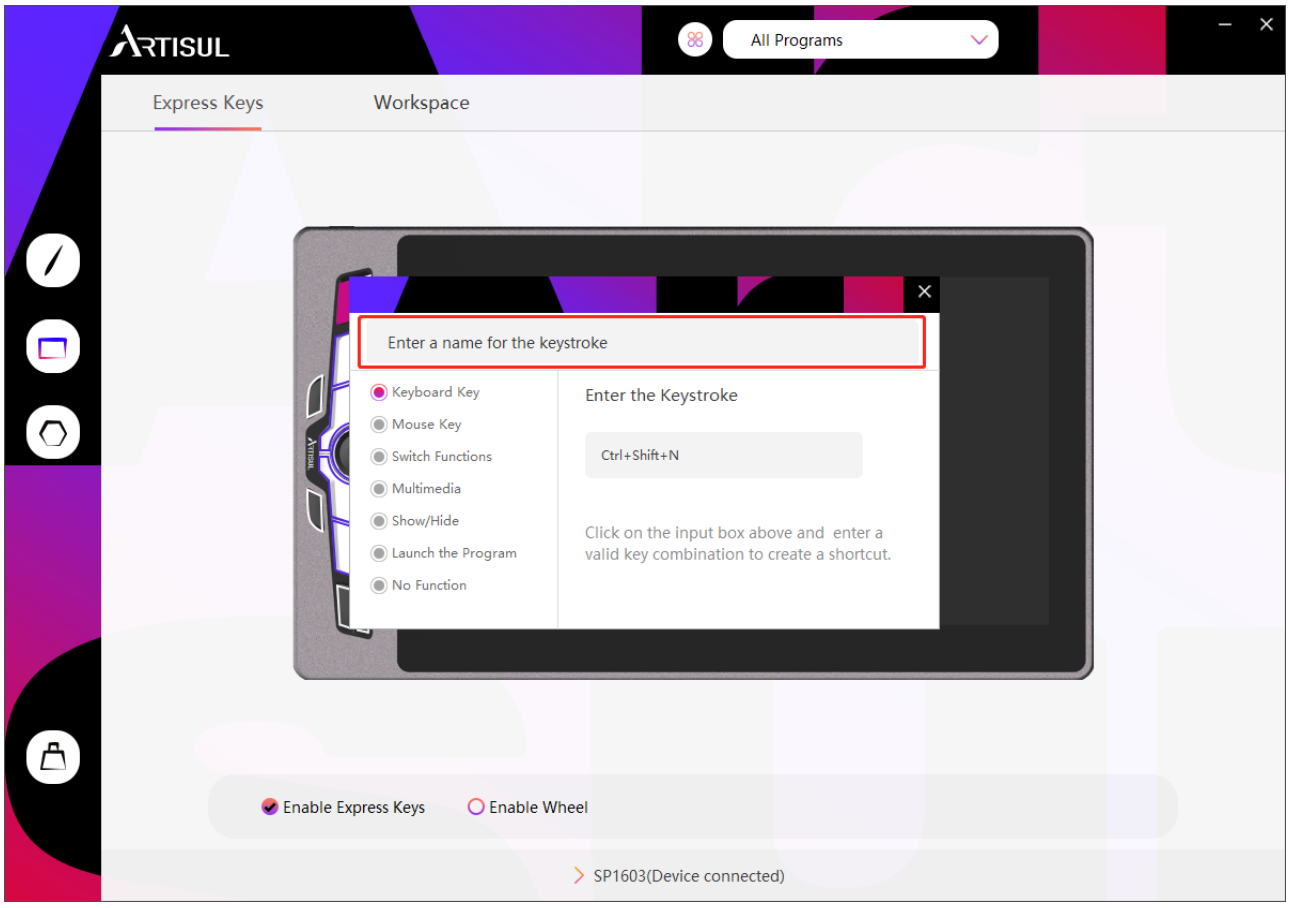
4.3 Press Key

Default functions: Place the cursor over one of the buttons on the driver or click a button to check its default value.

Custom functions: Click a button and then a pop-up dialog box appears. Choose what you want and set its function.

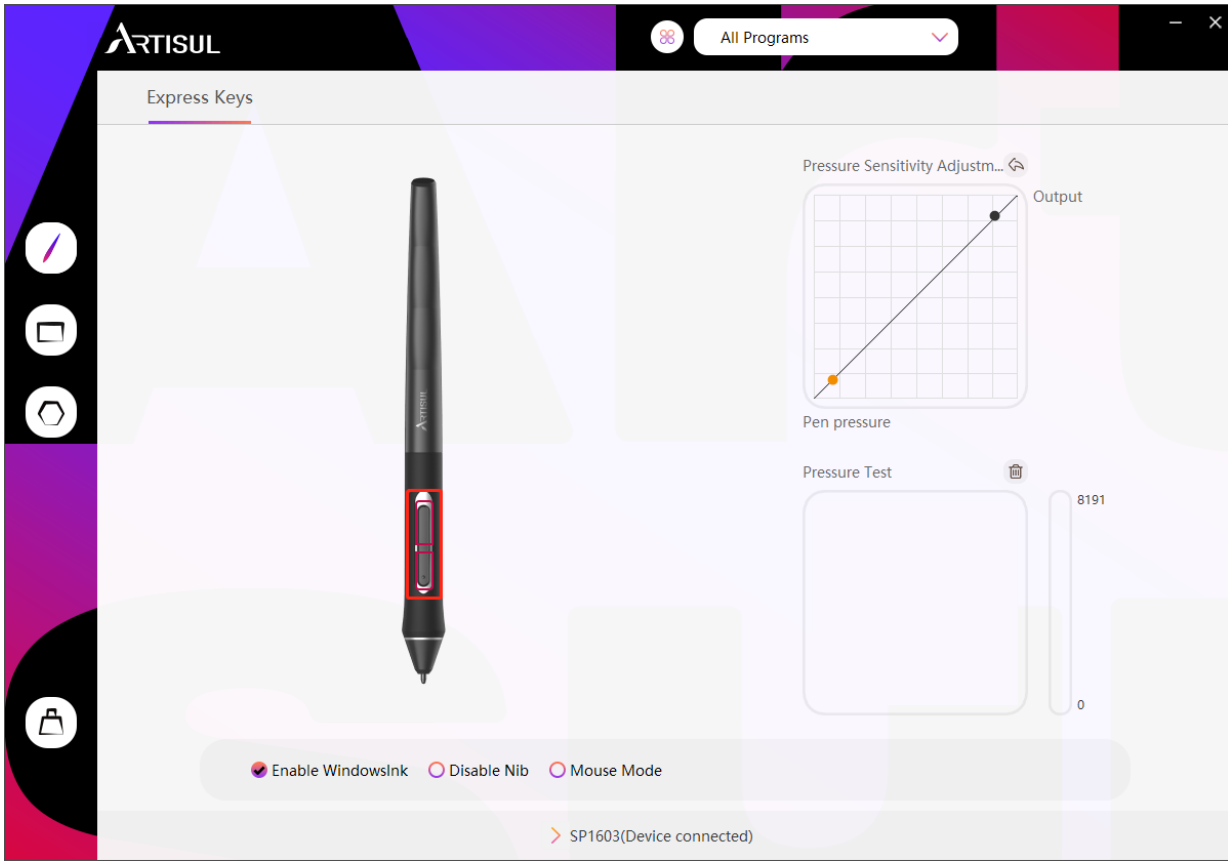
Enable/Disable press keys: Check/uncheck “Enable Express Keys”.

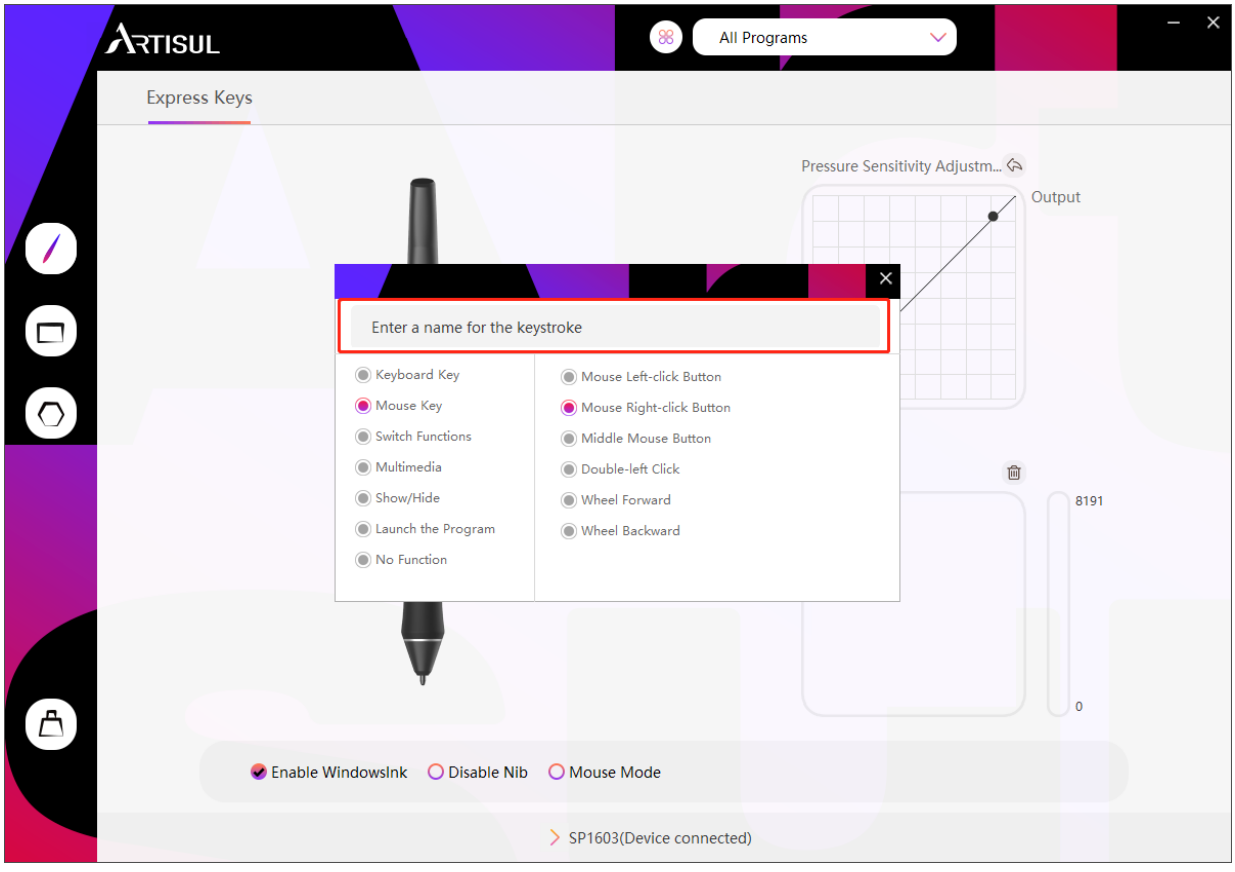

ARTISUL
All Programs
Express Keys
Workspace
Ctrl+Shift+N
Enable Express Keys
Enable Wheel
SP1603(Device connected)


ARTISUL
All Programs
Express Keys
Workspace
Enter a name for the keystroke
Keyboard Key
Mouse Key
Switch Functions
Multimedia
Show/Hide
Launch the Program
No Function
Enter the Keystroke
Ctrl+Shift+N
Click on the input box above and enter a valid key combination to create a shortcut.
Enable Express Keys
Enable Wheel
SP1603(Device connected)

4.4 Pen Button

Click the buttons to set custom functions. You can enter a name for the keystroke and choose the function you want.

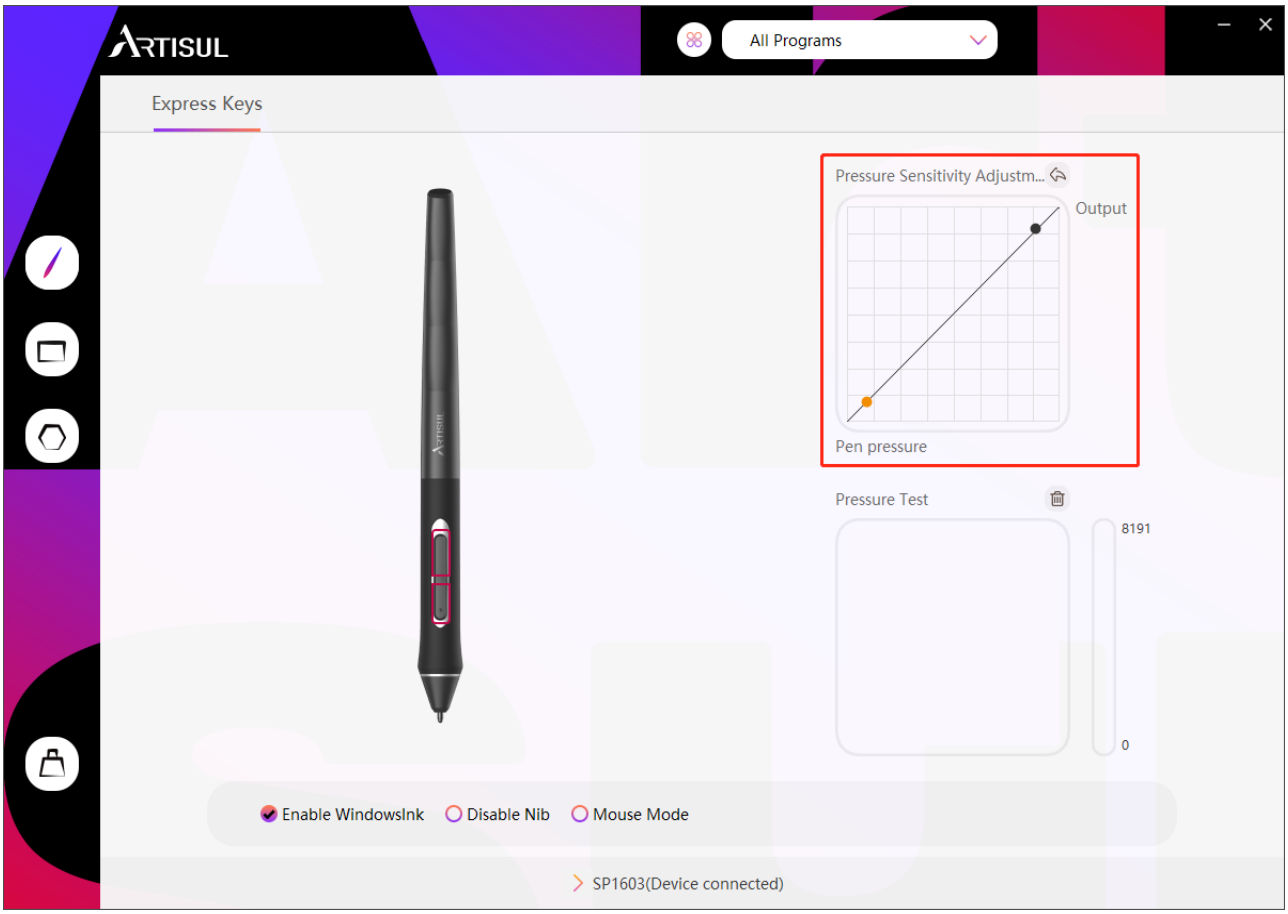




4.5 Pressure Sensitivity

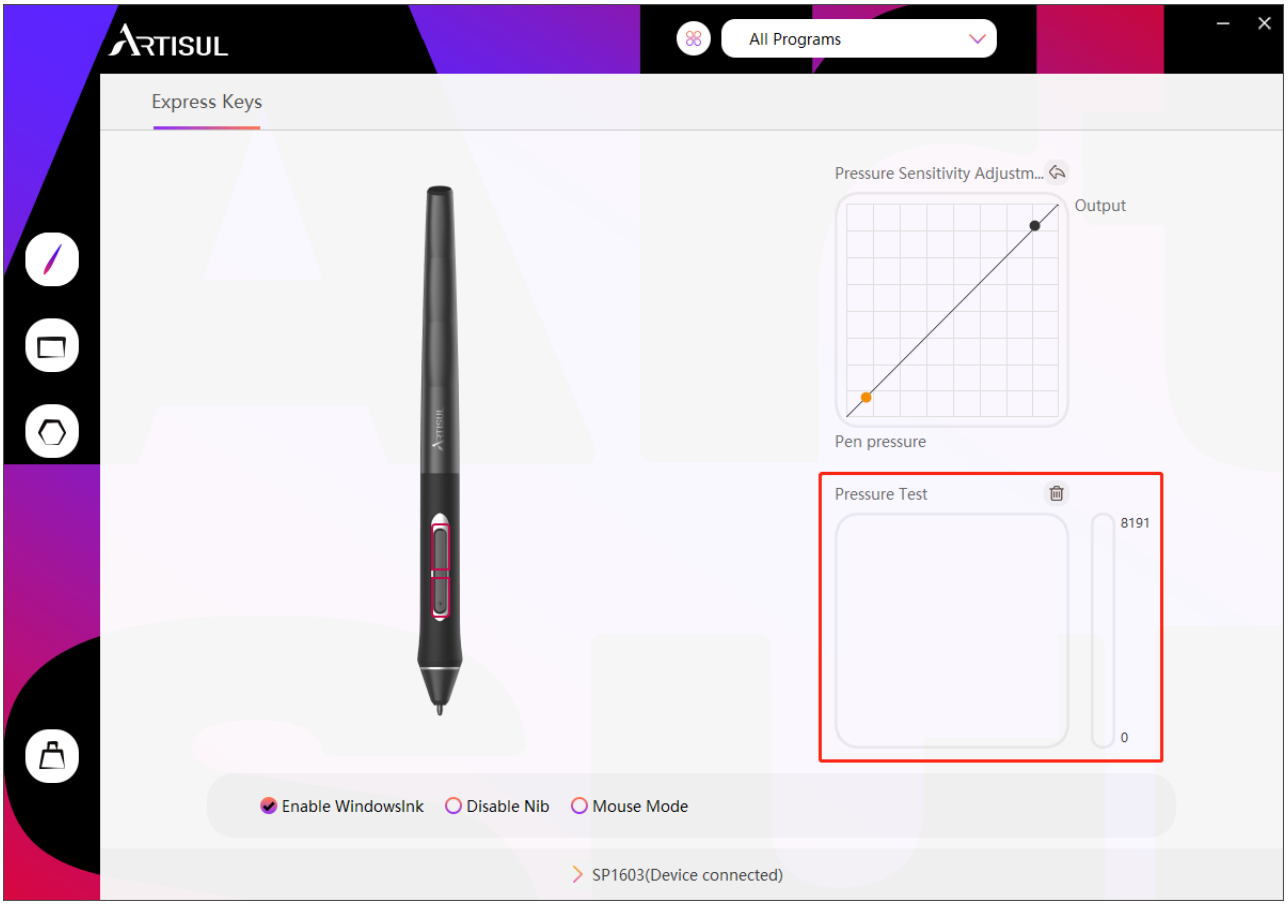
Adjust the pressure sensitivity level by dragging the slider in the Pressure Sensitivity box shown below:

Move the slider up to get a high level of pressure sensitivity, and move it down to get a low level of pressure sensitivity.



4.6 Pressure Sensitivity Test

Draw lines in the Pressure Test box with the pen, and the bar on the right will simultaneously show the pressure changes on the pen nib. Test several times until you find the appropriate pressure sensitivity level.

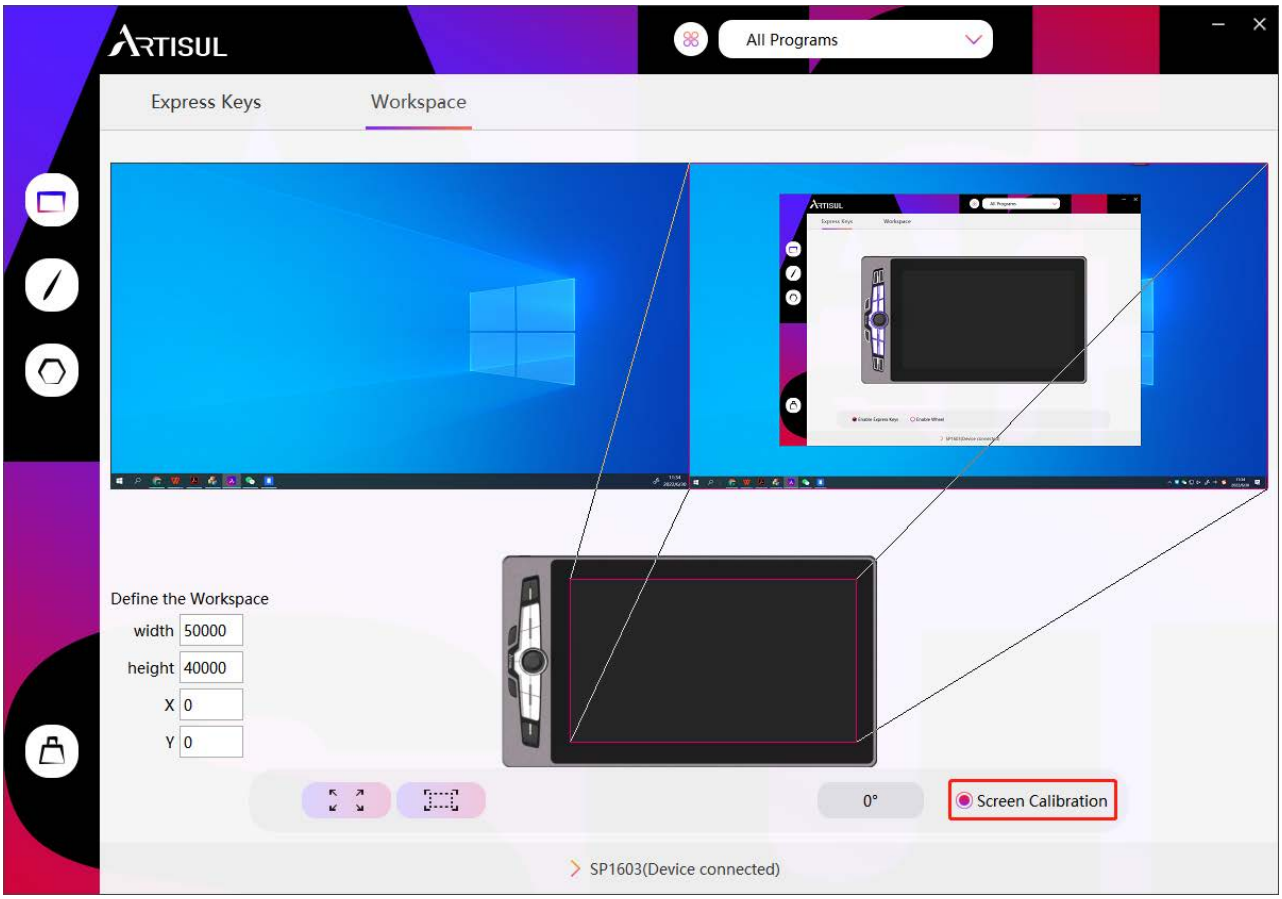


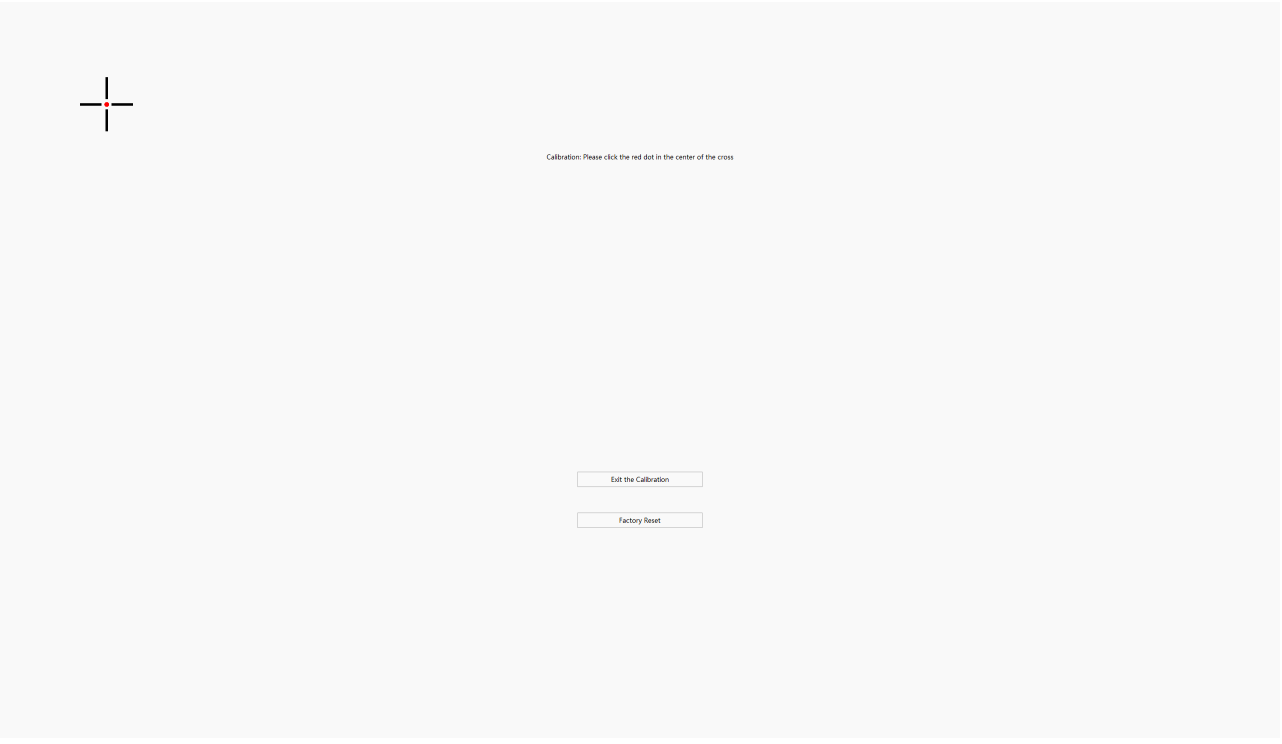
4.7 Calibration

Screen Calibration: Click the red crosses on the screen one by one to complete calibration.

Factory Reset: Click “Factory Reset” to reset the pen display.

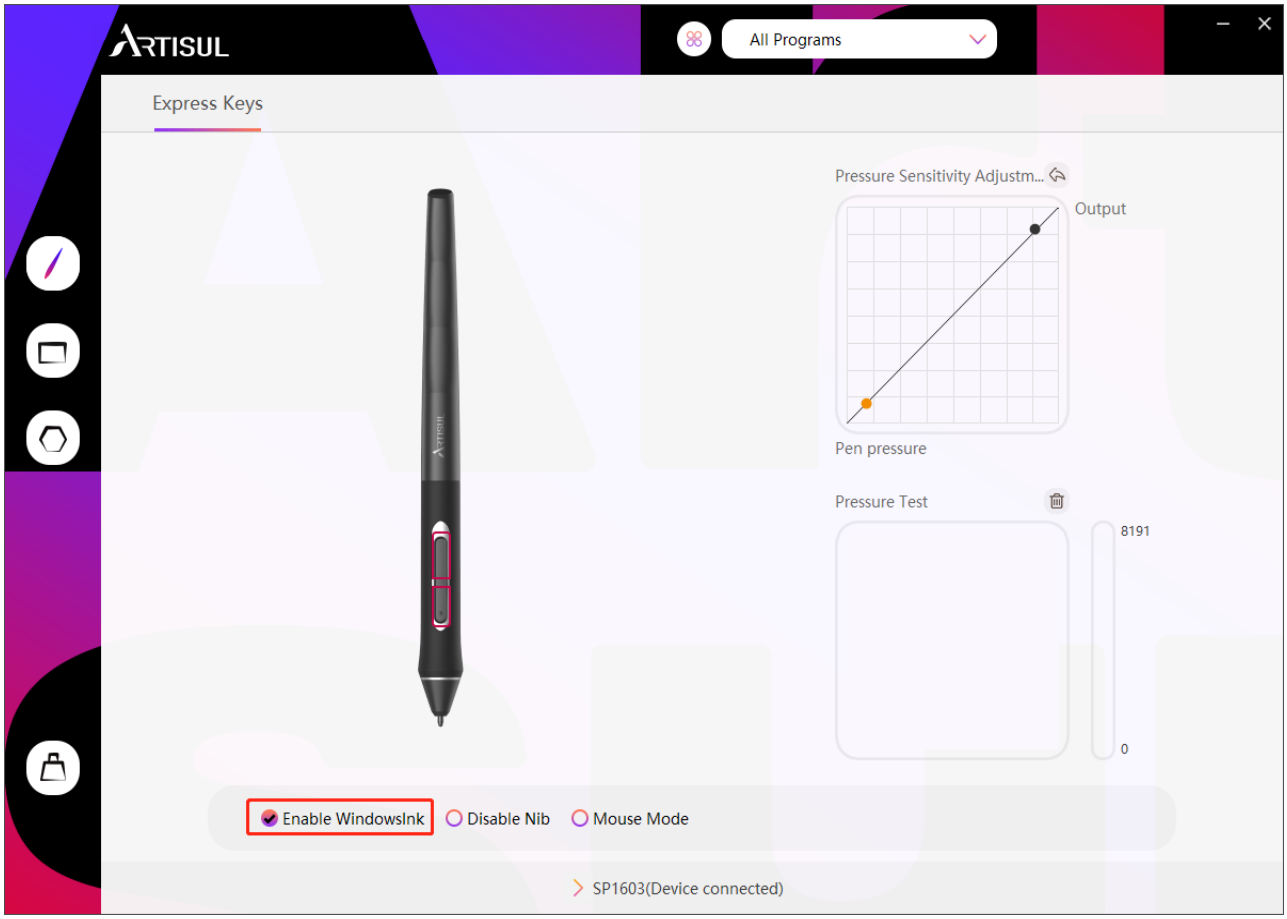
Cancel Calibration: Click “Cancel Calibration” or press “ESC” key to cancel the calibration.





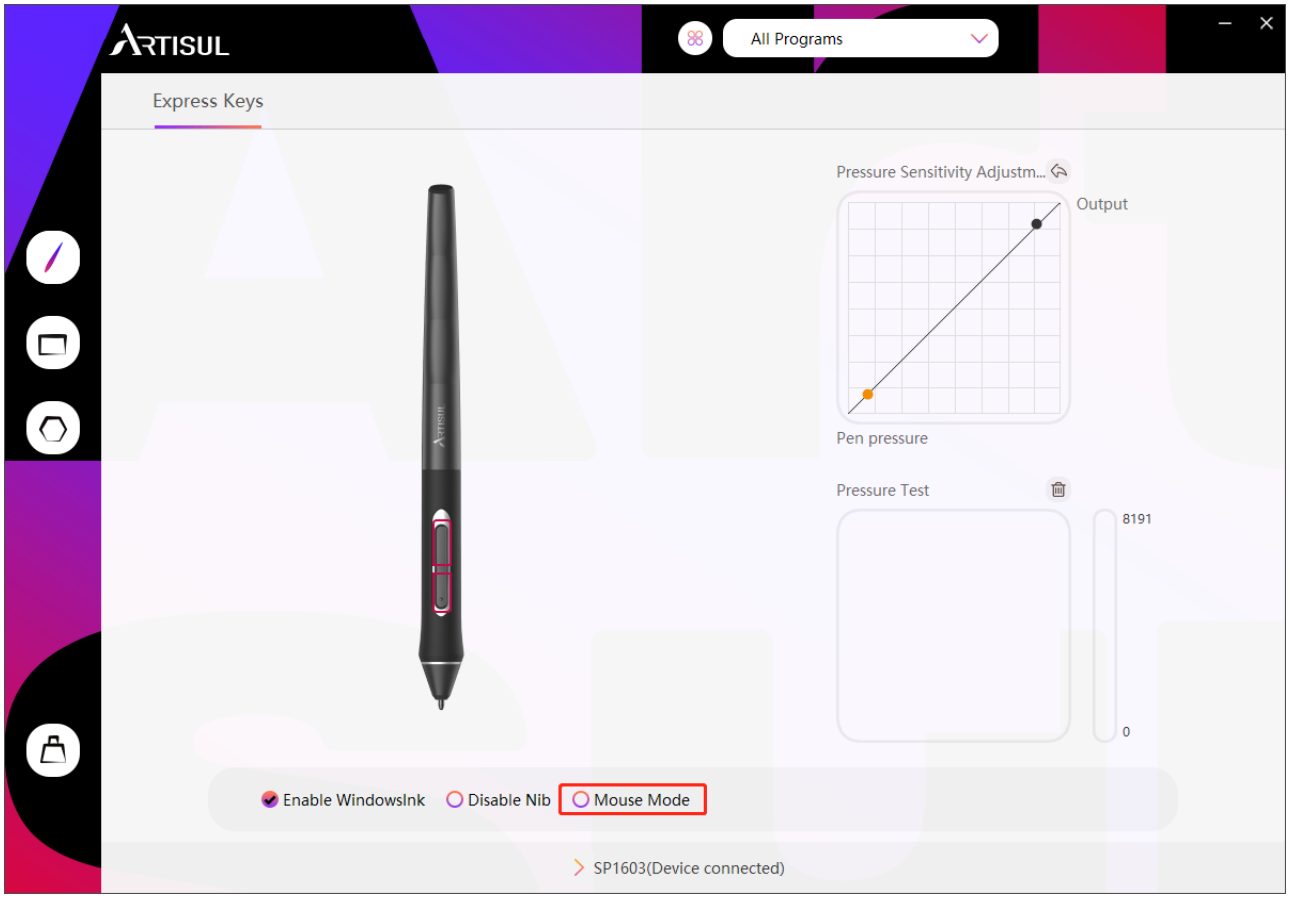
4.8 Enable Windows Ink

This function is for software that supports Windows Ink, such as Microsoft Office, Windows Journal, Adobe Photoshop CC, SketchBook 6 and so on.



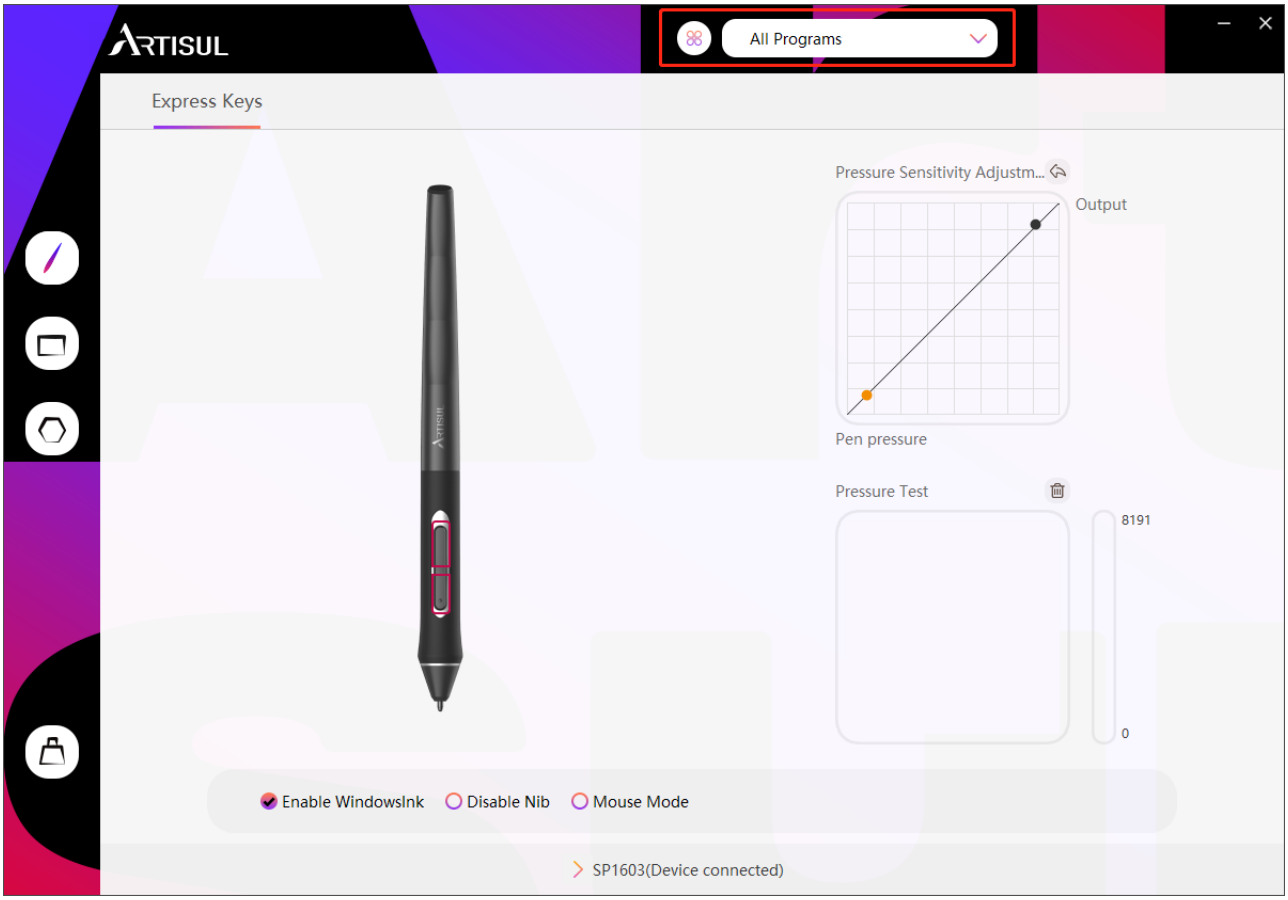
4.9 Mouse Mode

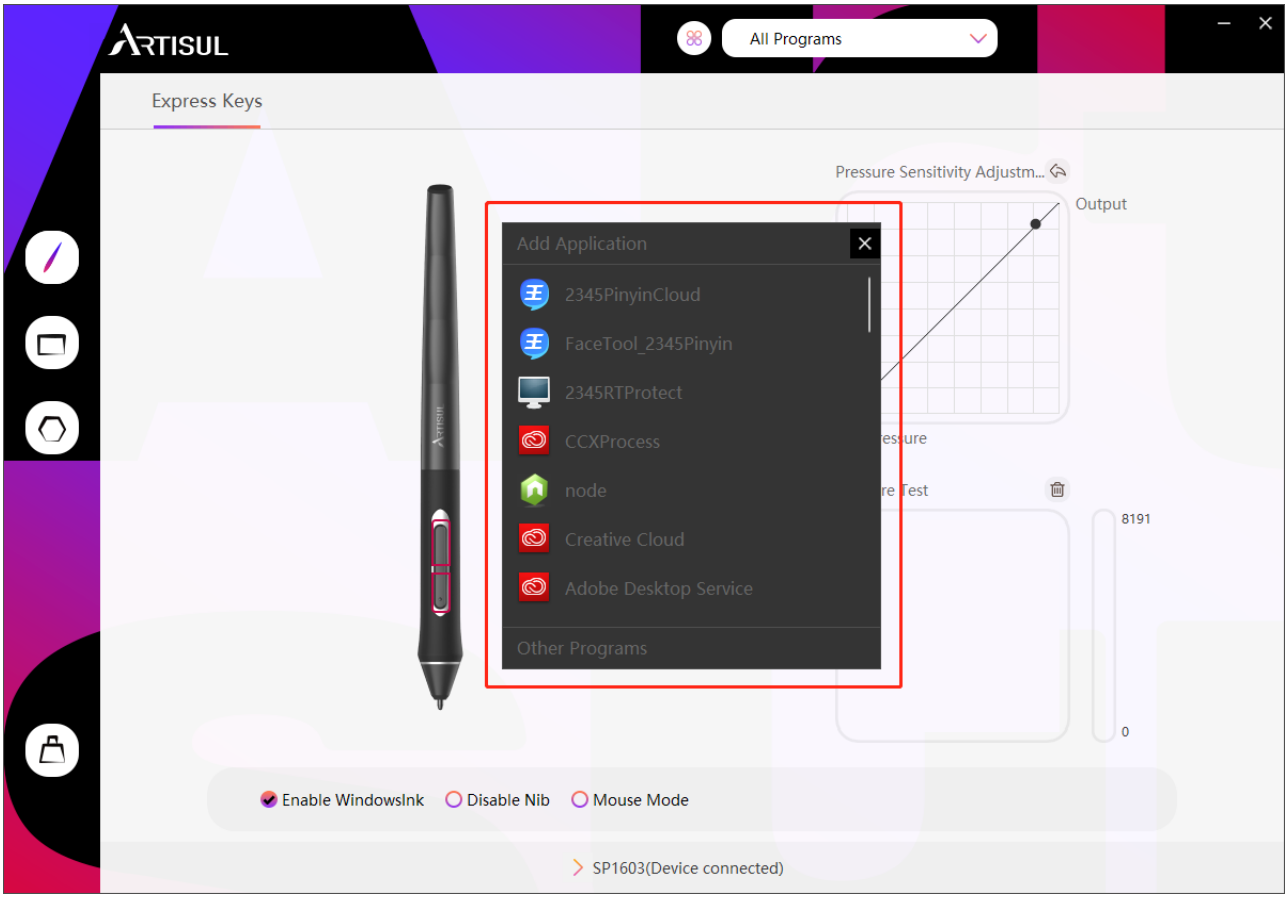
Select “Mouse Mode” to enable mouse mode (see the picture below). In Mouse Mode, as relative positioning is applied to the digital pen, you can use the pen as using a mouse to click the icon or open files close to the edge of screen without placing the digital pen at where the icon and files are.



4.10 Add a Program and Pressure Sensitivity Adjustment

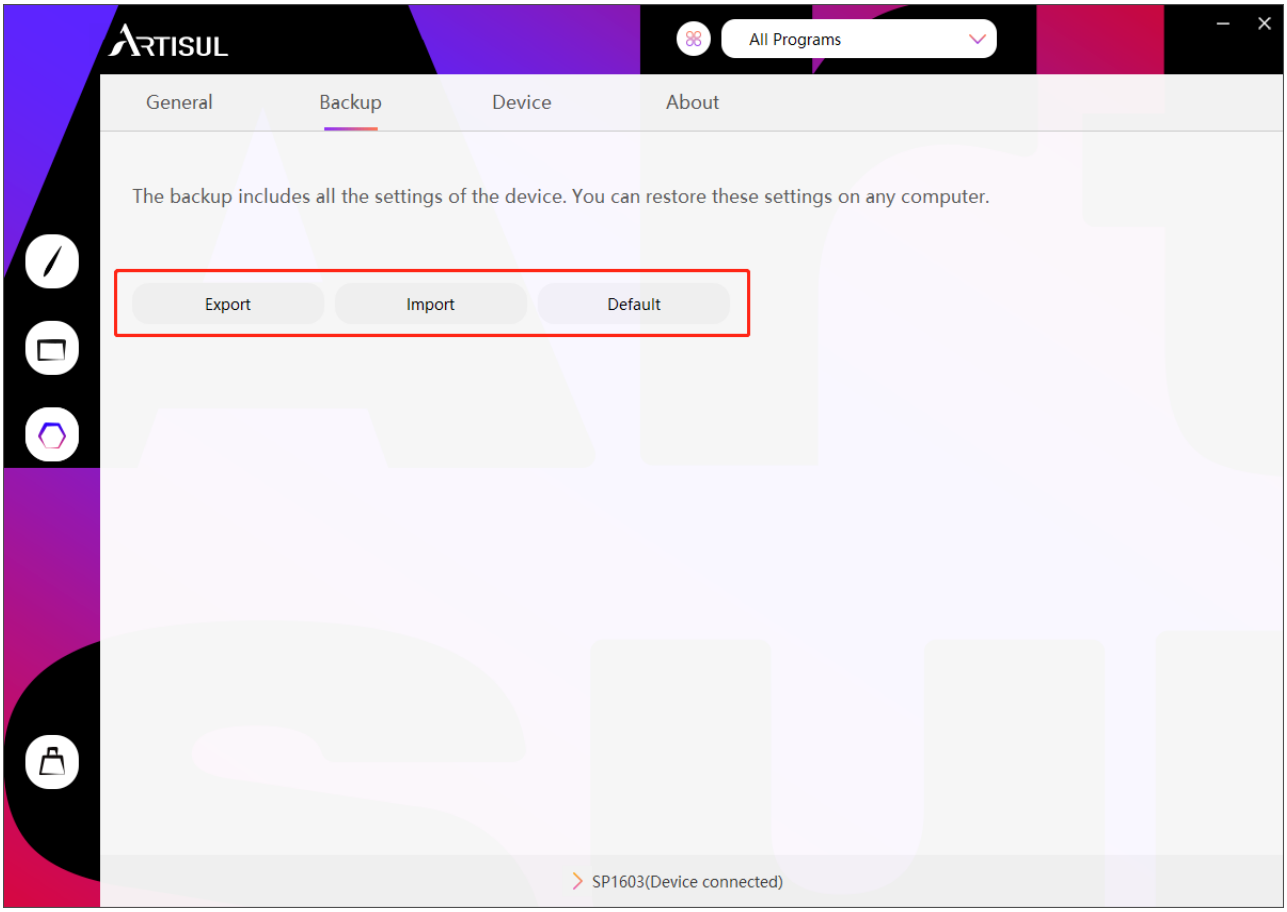
You can set specific functions of press keys and pressure sensitivity level for different programs. For instance, click Add a Program from the drop-down list, select a program, and set the functions of the press keys and pressure sensitivity level for it separately. The settings will be saved automatically.


ARTISUL
All Programs
Express Keys
Pressure Sensitivity Adjustm...
Output
Pen pressure
Pressure Test
8191
0
Enable WindowsInk
Disable Nib
Mouse Mode
SP1603(Device connected)


ARTISUL
All Programs
Express Keys
Pressure Sensitivity Adjustm...
Output
Add Application
2345PinyinCloud
FaceTool_2345Pinyin
2345RTProtect
CCXProcess
node
Creative Cloud
Adobe Desktop Service
Other Programs
8191
0
Enable WindowsInk
Disable Nib
Mouse Mode
SP1603(Device connected)

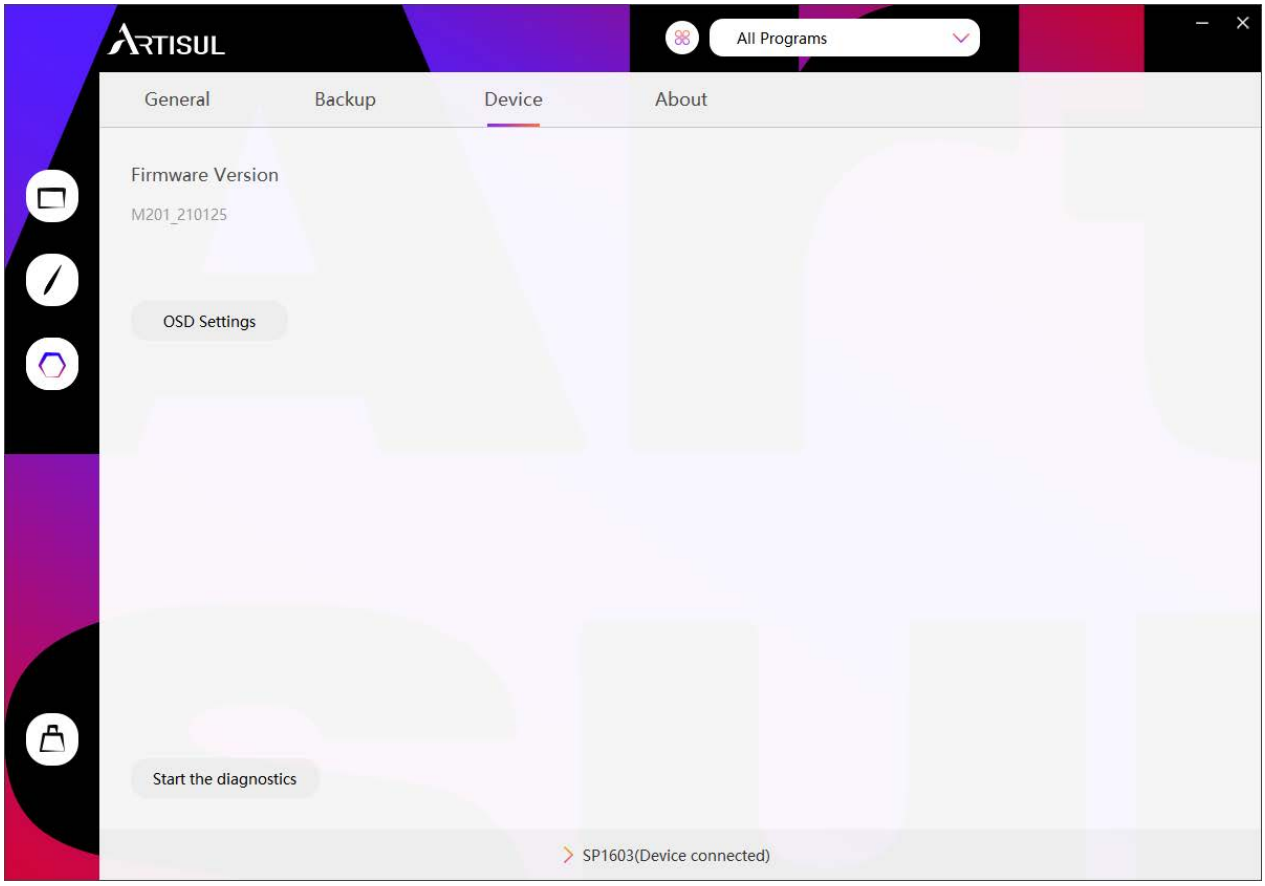
4.11 Import and Export Data

The functions you set in the driver will be saved and you can import or export these data in Backup.



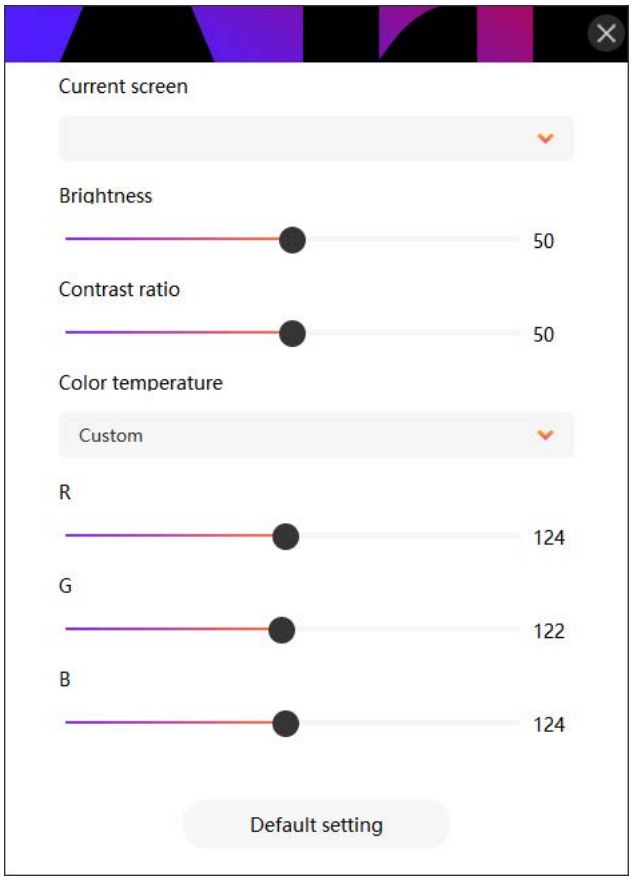
4.12 Device

You can view the information of the firmware and the connected product here.



* OSD Settings

Brightness: Users can drag the corresponding slider to adjust the brightness.
Contrast ratio: Users can drag the corresponding slider to adjust the contrast ratio.
Color Temperature: “Custom”, “6500K”,“9300K”mode to be chosen. In “Custom” mode, users can change the color temperature by adjusting the RGB value.



5. Specifications

	Model	SP1603
Screen	Panel Size	15.6inch
	Resolution	1920 x 1080(16:9)
	LCD Type	IPS
	Active Area	344.16 × 193.59mm
	Contrast Ratio	1000 : 1
	Brightness	220cd/m2
	Response Time	25ms
	View Angle	89°/89°(H)/89°/89°(V) (Typ.)(CR ＞ 10)
	Gamut	90% Adobe RGB 88% NTSC 120% sRGB
Touch	Touch Type	Electromagnetic Resonance
	Resolution	5080LPI
	Pressure Level	8192
	Accuracy	±0.5mm(Center) ±3mm(Corner)
	Sensing Height	10mm
	Report Rate	>220PPS
Pen	Model	P77
	Net Weight	13g
	Dimension	164.3 x Φ12.3mm
	Buttons	Two Customizable Buttons

General	Input Voltage	100-240VAC, 50/60Hz
	Output Voltage	DC 5V 2A
	Output Interface	HDMI1.4, USB3.1Type-C (DP1.2)
	Press Key	14 Customizable press keys + 1 Dial
	Dimension	442 × 274 × 12.5mm
	Net Weight	1.32KG
	OS Support	Windows 7 or later, macOS 10.12 or later

6. Trouble Shooting

6.1 Display Problem

Malfunctions	Suggested Solutions
Power indicator does not work	• Make sure the pen display is powered up. • Please check the power socket.
No display on the monitor	1. Please make sure the pen display is powered up. 2. Make sure that the video cable is connected correctly. 3. If the pen display is connected to a laptop, please start the laptop, plug the video cable, and choose the Extend mode on the "Display" interface of your laptop (The setting method may vary from laptop to laptop. For detailed information, please refer to the user manual of the laptop). 4. Please check whether the indicator is green. If not, the pen display and laptop are in sleep mode, press any key or move the mouse to wake them up. 5. Use a new video cable instead if the old one you used is bent or damaged.
Blurry screen	Please change the resolution of your pen display to 1920 x 1080.
Lost color	Please make sure that the video cable is not bent or broken.
Color Inconsistency	The slight color inconsistency of the same image shown on different pen displays is normal because the color temperature of ambient light in the environment differs from region to region.
Image jitter/Moiré effect	There may be devices which cause electromagnetic interference around your pen display.

6.2 Functional Failure

Malfunctions	Suggested Solutions
Digital pen does not work or no pressure sensitivity in graphics software	1. If the driver is damaged or not installed correctly, close all graphics software, uninstall the driver and then reinstall it. 2. Once the pen nib is worn out and becomes too short, replace it with a new one. 3. Try another USB-A port and restart your computer.
Cursor problem	Try to unplug the USB cable and plug it again or restart your computer.
Pen buttons does not work	Please make sure the pen nib does not touch the surface of your display and the distance between the nib and the screen is within 10mm when you press the pen buttons.
Cursor and pen nib are not aligned	Please do the calibration.

For more information, please refer to:

http://support.artisul.com/en/support/home

7. Contact Us

If you have any questions, please feel free to contact us on the website: www.artisul.com, or send an email to service@artisul.com.