

SmartPen Blue

Digital Board & Pen

User's Guide



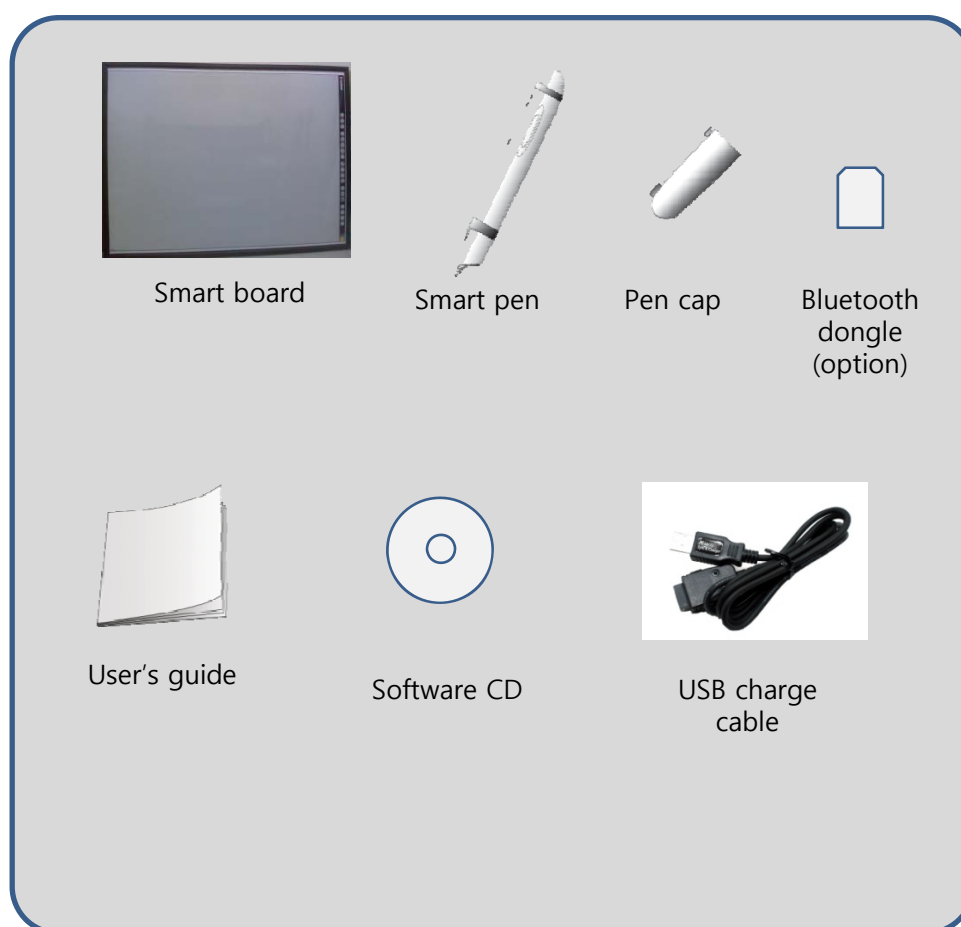
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1. Introduction
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Please read the user's manual before using the product.

- ◆ Problems caused by using the product against the user's guide cannot be protected under the consumer protection act.
- ◆ Please keep the user's manual and warranty for your information.

Product configuration



Beam projector is not included in the product configuration
Please refer to chapter 2 for selecting compatible beam project.

Product specifications



Smart board
specifications

Product	WhiteBoard (PWB6700 / PWB9400W)
Size(mm)	PWB6700 : 1460(L) x 1110(H)
	PWB9400W : ??
Pattern sector(mm)	PWB6700 : 1353(L) x 1015(H)
	PWB9400W : ??
Surface	Flat coated whiteboard
Usable marker pen	Marker pen for flat coated whiteboard
Exterior frame material	Aluminum
Weight(kg)	PWB6700 : 9.3
	PWB9400W : ??



Smart pen
specifications

Product	SmartPen Blue(PB-100)
Bluetooth specs.	Ver2.0 (class2) SPP(Serial Port Profile)
Frequency used	2.4GHz
Wireless distance	Within 10M
Continuous duration	2 hrs
Waiting time	8 hrs / at Power ON
Power source	3.7V Li-polymer battery
Charging time	Within 2 hrs (charge via USB)
Perceived resolution	600 DPI
Input levels	256 levels
Size(mm)	158(L) x 20(H) x 18.5(W)
Weight(g)	33

Basics principles



- Smart Board is a newly innovated solution which implements a touch-type digital board using a digital pen and pattern-printed board.
- Micro-patterns printed on the board are recognized by Smart Pen which transmits the location information via Bluetooth to computer or notebook.
- You may freely write or draw on the screen with any program such as a multimedia lecture or presentation material projected on the screen.

Installation driver & Papertablet™

- PaperTablet™ is a manager software to use Smart board.
- It is advised to carefully read and be familiar with the user's guide since connecting Smart Pen via Bluetooth is inevitable to setup digital pen and screen.
- Microsoft .NET Framework 3.0 and Windows Installer may be installed in the beginning of installation.

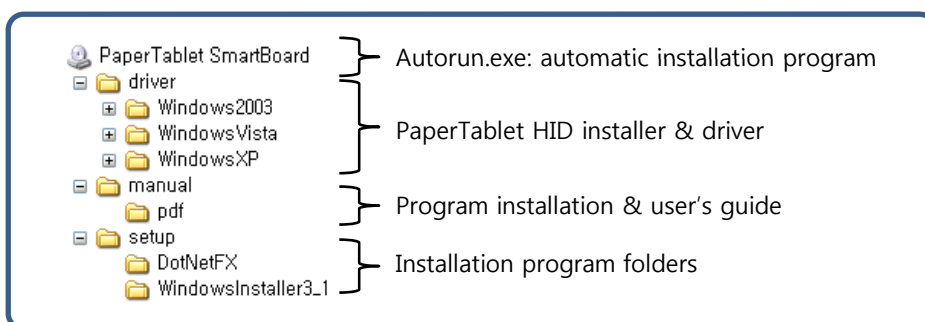
Minimum Requirements	Recommended Requirements
<ul style="list-style-type: none">• Intel Pentium4 2.0GHz or above• 1GB or above memory• Windows XP/Vista	<ul style="list-style-type: none">• Intel Core 2 Duo 1.7GHz or above• 2GB or above memory• Windows Vista Ultimate/Home Premium

CD Components/configuration

Installation CD is composed of following components.

In general, the automatic installation program is executed upon insertion of the CD with simultaneous installation of the driver and program.

If the installation is not executed automatically, click Autorun.exe in the installation CD.

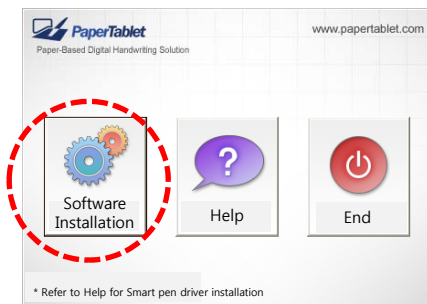


In case PaperTablet™ was previously installed or reinstalling.

If PaperTablet™ was previous installed, the existing version should be deleted from Add or Remove Programs found in Control Panel.

Also, Easy PaperTablet HID driver registered in Control Panel-Installation/Configuration Manager-Host controller Interface device should be [removed] before new installation.

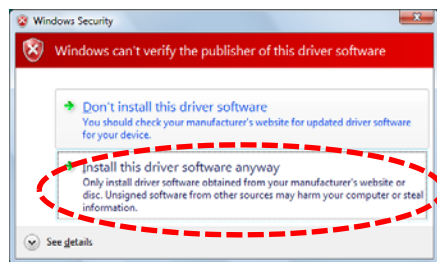
PaperTablet™ Installation



Step 1 : Run installation program

Automatic installation program will be executed upon inserting of the installation CD. Click [Install software] button.

If the installation program doesn't run automatically, execute Autorun.exe in the installation CD.



Step 2 : HID driver installation

Easy PaperTablet HID Driver will be installed. Click [Install..].

- ⚠ A message requesting to select installation driver might appear. Since PaperTablet HID driver is installed automatically, ignore the message and wait for a short while.
- ⚠ The message may be different for Windows Vista due to reinforced authority and security. Select [allow] or [continue].



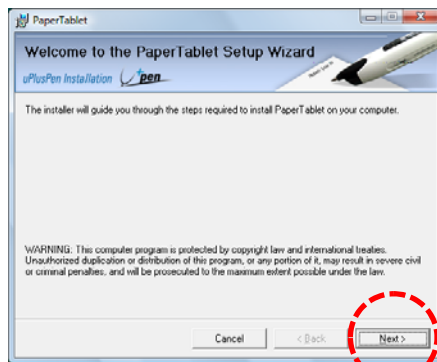
Step 3 : Automatic installation of HID driver

Hardware Search wizard will start. At this time, wait about 5 seconds. Driver will be installed automatically and go onto next screen.

- ⚠ Do not select search option or click [cancel] button.
- ⚠ The message may be different in Windows Vista due to reinforced authority and security. Select [allow] or [continue].

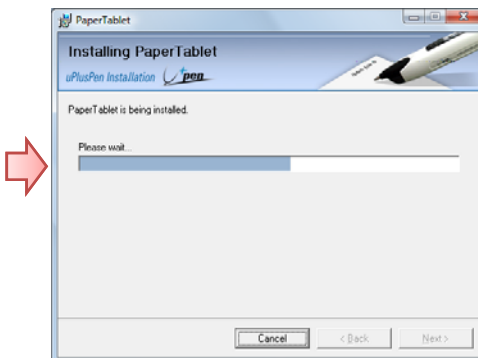
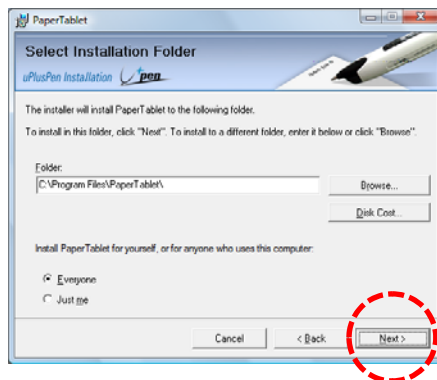
Once HID driver installation is complete, program Installation Wizard will be executed.

PaperTablet™ installation (continue)



Step 4 : PaperTablet™ program installation

Once HID Driver installation is complete, PaperTablet program installation will begin. Click [next] button to continue installation.



Communication setup for Smart Pen(Bluetooth)

- Smart Board uses Bluetooth communication to transmit the coordination information. Following setup is required to connect Bluetooth.
- This product supports Microsoft Bluetooth stack.

Connecting Bluetooth device(receiving device)



If the computer or notebook has a built-in Bluetooth dongle, provided Bluetooth dongle need not to be used.

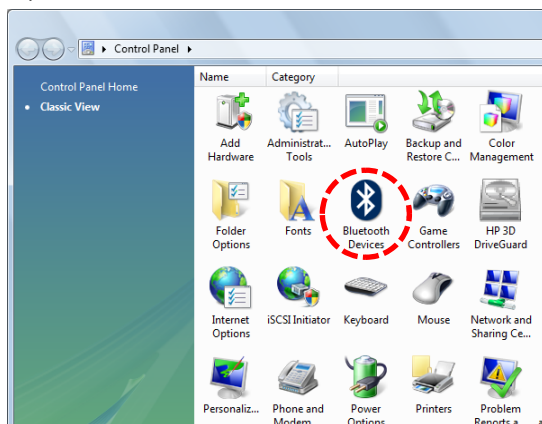
Connect the Bluetooth dongle if the computer or notebook does not have a built-in Bluetooth. (The Bluetooth dongle is option)



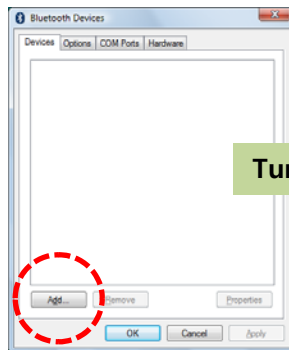
Driver will be automatically installed upon connection of Bluetooth dongle to USB.
(Windows XP Service Pack 2 or above version)

Adding Bluetooth device (Smart pen)

Open Control Panel to execute "Bluetooth device."

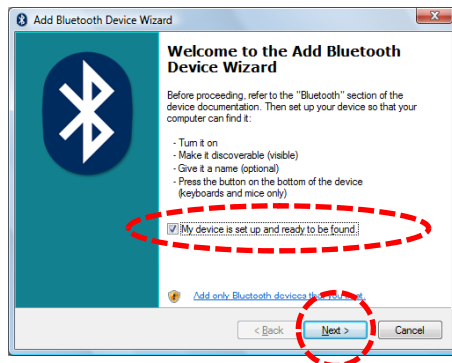


Adding Bluetooth device (continue)



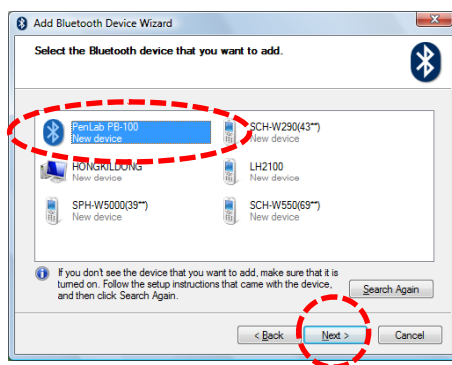
Start adding device by clicking on "Add" button.

Turn on Smart Pen's power.



When "Add Bluetooth Device Wizard" is executed, turn the pen's power on. When the pen's power is on, check on "My device is set up and ready to be found" box and go on to next step.

⚠ Please refer to chapter 4, SmartPen, on turning on the pen's power.



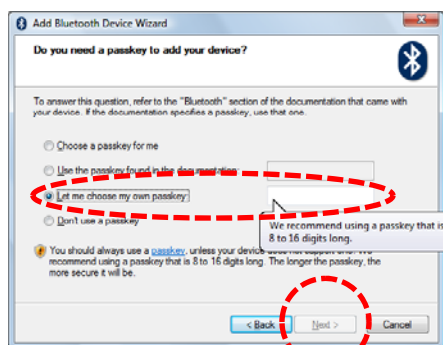
Once "PenLab PB-100" is searched, select the device and go on to next step.

⚠ While searching, Smart Pen's blue and red LEDs will light alternatively.

⚠ Run "search again" if searching is not executed. If searching persistently is not executed, turn the pen's power off and on again.

⚠ Please refer to chapter 4, SmartPen, on LED signs and turning on power.

Adding Bluetooth device (continue)



Click "manually select code key" to input code key.

Code key : 1234

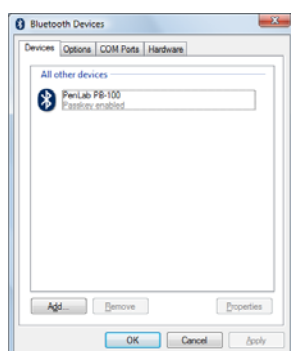


You will be able to see that "Add Bluetooth Device Wizard" is completed as well as Bluetooth communication COM setup.

Outgoing COM port : COM 3

⚠ Confirm the port since it's required for PaperTablet setup.

⚠ Com port may be established differently due to different user environment.



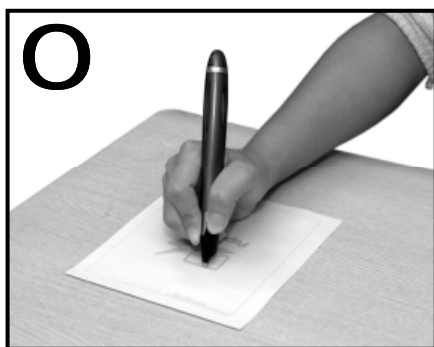
Once device is added, "PenLab PB-100" device will appear on the screen as seen on the picture.

⚠ When 2 or more pens are being connected, turn one digital pen at a time to go through the "Bluetooth device addition" steps one by one. Writing down each pen's COM port information is recommended.

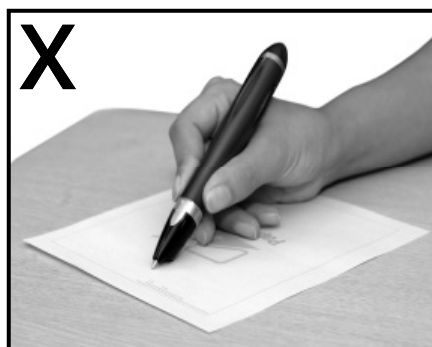
Instructions for product usage

Proper Smart Pen positioning

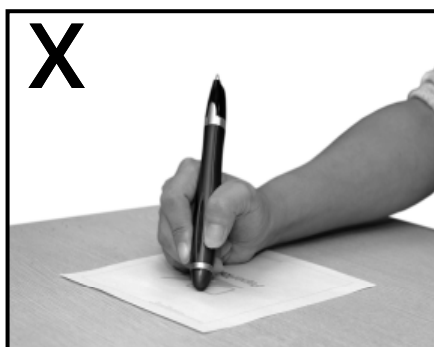
Since Smart Board and Pen use optical character location recognition method, the pen holding position might affect the performance of the Pen. Please refer to following positioning below in using the pen.



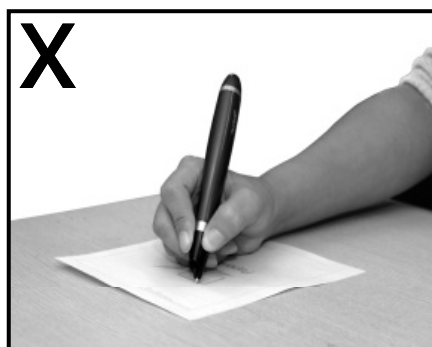
Correct position



Do not lower the pen too low.

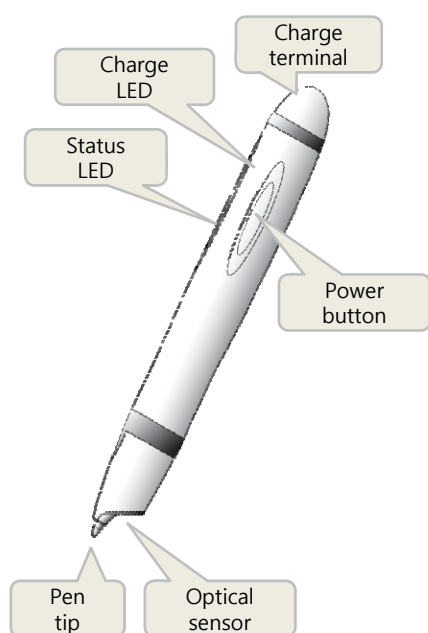


Pen rotated upside down will not activate the pen.



Pen's optical sensor is pointing upward.

Parts & activation status of Smart Pen



● Pen on

Press power button for 2-3 seconds.
With a vibration, pen's top LED will blink and go into connection waiting mode.

● Pen off

Press power button for 2-3 seconds until the status LED is turned off.

● Pen's status according to LED (Status LED)

Blue/red flicking	Bluetooth connection waiting mode.
Purple	Bluetooth connected for less than 2 minutes
Green	Ready to use state with Bluetooth connected
Red	Low battery warning

● Charge status according to LED (Charge LED)

Blue	Charging(normal)
Red	Charge error
LED off	Charge completed

※ Notice

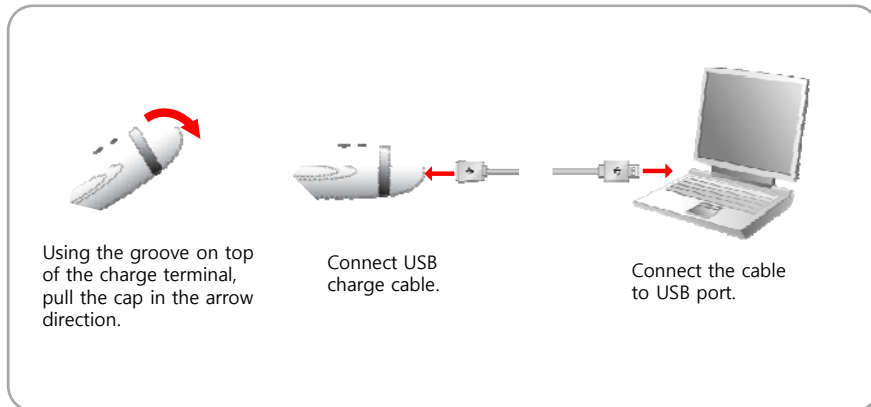
- ※ The power will not turn on when uncharged or built-in battery is discharged.
- ※ pen is usable during USB charging.

Smart Pen Charging & pen tip replacement

Charge

Charging Smart Pen via USB connected to a computer is possible.
Charge LED turns green during charging and off when completed.

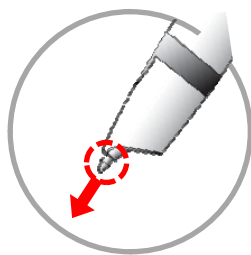
- Computer USB charge: Turn on computer and connect PC and pen using a USB cable as shown below.



- Connection of the Smart Pen to PC via USB allows automatic charging as well as usage.
- Use only the USB charge cable provided since usage of different cable might be the reason for malfunction and/or breakdown.
- Charging may not occur during waiting mode of the computer.
- Reconnect the cable when charge LED turns red.
If such problem persists, seek a technician.
- Charge and store at room temperature. Hot or cold environment may lead to delay or prevent charging.
- Since the built-in battery is expendable, the life time may be shorten slightly according to the usage. (The warranty period for the built-in battery is 6 months)
- It takes about 2 hours to completely charge a discharged battery. (Differ according to the charging environment)

Changing pen tip

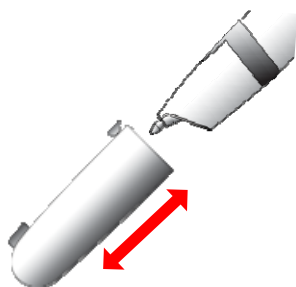
SmartPen's pen tip is made out of permanent metal which doesn't require replacement. If it is necessary to replace the pen tip, it should be replaced as followed.




- 1) As shown on the picture, hold the pen tip and pull toward the arrow to remove the pen tip.
(Tools such as a pliers should be used for removing pen tip)
- 2) Insert a new pen tip from the front side of the pen.
- 3) Press on a hard surface until the pen tip is firmly fixed.

Pen cap insertion and removal

Place the pen cap on the pen for protection when moving or not using. Place and remove the pen cap as followed.



- 1) Pen cap insertion: insert in the direction of the pen tip.

 When inserting, face the stick on the pen cap toward the top. Inserting in the opposite direction will prevent the cap from proper placement.

- 2) Pen cap removal: hold the pen cap and pull in the opposite direction of the Smart Pen.

Troubleshooting

- **Cannot turn on the power.**
Check the battery for discharge. Charge using USB charge cable before using.
- **Won't charge even though the power is connected.**
Check for proper connect with the USB charge cable.
Check if power is being supplied to the USB terminal.
(Power may not be supplying if PC is in waiting mode or off)
- **Cannot connect the pen and LED is blinking continuously.**
Check if the Bluetooth device on the receiver(PC) is on.
Check is the receiver(PC) is correctly connected to the pen. (refer to Bluetooth connection)
- **All the status LEDs on the pen are on and pen's not working properly.**
If the pen is not connected for a certain period of time, it goes into a energy saving mode.
Lightly touch the pen's tip or turn the power off and on to connect it back again during its connection waiting status(purple LED).
- **The pen is not working even though the pen's status LED is properly on.**
Check if designated paper with printed pattern is being used.
Check if the pen is being used within the effective movement angle range. Be familiar with the basic pen usage.
- **The pen keeps vibrating.**
Check if designated paper with printed pattern is being used.
When continuous error occurs during usage, the pen's inner motor vibrates.
Be familiar with the basic pen usage.
- **The pen LED suddenly blinks while using the pen.**
This may occur when Bluetooth is disconnected. Try reconnecting Bluetooth with a computer.

Safe usage

- **Keep out of reach of children and animals.**

A child may bite or suck on the product which may lead to shock or explosion. Some pieces may be swallowed to block the throat or airway which may lead to suffocation.

Please check for proper handling.

- **Keep it clean**

Foreign materials on charge cable and/or battery charge terminal may prevent the pen from charging properly. Use a soft cloth to clean the product and avoid using flammable chemicals (alcohol, benzene, thinner, etc) for your safety.

- **Use and store at room temperature.**

Exposure to high temperature for a duration of period may lead to explosion, fire, deformation. Using or storing the product in low temperature environment may prevent proper functioning and durability of the product. Always use and store in room temperature.

- **Be sure to use authentic product.**

Only products provided and approved by the manufacturer should be used. Using unapproved products such as battery may be the reason for decreased durability, functioning and safety.

- **Avoid water or moisture.**

Submerging or exposing the product or charge cable in a moisture environment may lead to electric shock or malfunction. Also, since a malfunctioning product with discoloration may prevent from receiving free service, it is recommended to take caution.

- **Avoid drying submerged with a heating device.**

Drying a submerged product using microwave, heater, or dryer may lead to explosion, deformation or malfunction and guarantee user safety. Take the submerged product to a designated service center without turning on the power.

- **Avoid using the product in prohibited areas such as airplanes and hospitals.**

Using the product in places using high frequency equipments such as airplanes and hospitals may lead to an accident. Be sure to follow instructions of the particular facility. (Same for flammable materials and explosive areas)

- **Do not place pen and charge cable near or in heating devices (heater, microwave, etc)**

May lead to deformation, explosion or fire.

- **Do not change, disassemble, or repair.**

Strong impact or drop may lead to product malfunction or explosion. Disassembled or changed product may not receive free after service.

- **Avoid using near a microwave or wireless LAN.**

May cause malfunction or noise due to usage of identical frequency band.

- **Risk of explosion if battery is replaced by an incorrect type. Dispose of used battery according to the instructions.**

Service/Customer support

This product is a supplementary device used after connecting to other machinery via Bluetooth. Customer support and service are possible for mechanical damages and malfunctions while proper connection via Bluetooth.

However, the machinery's Bluetooth is not subject to customer support and service.

- Product inquiry and customer support : (02) 2026-0373

- Please call customer service before sending the product to the company.
- The product should be packed shock-proof to avoid shock/damage during shipping.
- Include customer name, contact number, malfunction status, shipping address when shipping.
- The shipping cost will be included with the free after service during the warranty period.
- Repairing a damage(s) caused by user negligence will not be free of charge even during the warranty period.

- Shipping Address

Suite # 1309, Woorim Lions Valley C-dong, 371-28, Gasan-dong, Geumcheon-go, Seoul, South Korea
ILS Communication Ltd.

Customer support team

European CE notice to users and product statements

This product is CE marked according to the provisions of the R&TTE Directive(99/5/EC). Hereby, ILS Communications Inc, declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. For further information, please contact <http://www.penlab.co.kr>

FCC notice to users and product statements

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. 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.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Limited Warranty

**This product has passed strict quality control and inspection.
Please fill out the following product warranty information for your record.**

Free Service

1. You may request for a technical service or exchange for defect or out of order products with normal usage free of charge within the warranty period.
2. Using the product commercially will reduce the warranty period in half.
3. You may receive free technical service within one year from the purchase date for normal usage.
4. The warranty period for built-in battery is 6 months.

Paid Service

1. Products used outside the normal or recommended boundary.
2. Malfunction due to user negligence, accident, unapproved test or repair.
3. Malfunction due to natural phenomenon.
4. End of expected duration of the expendables.

Product name		SmartPen Blue
Model number		PB-100
Warranty period		1 year
Purchase date		
Purchase location		
A/S & technical support		02) 2026 - 0373
Customer	Address	
	Name	
	Contact	