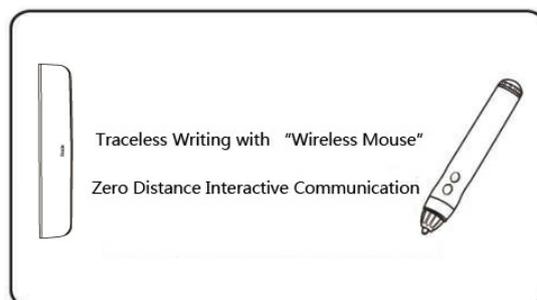


Instruction Manual

B3D Series Portable Electronic Whiteboard



Traceless Writing with "Wireless Mouse"
Zero Distance Interactive Communication

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- When assembling the B3D Electronic Whiteboard, please refer to the Installing Instructions in page 18 to page 22.
- Before operating this unit, please read the Instruction carefully and keep it properly for future reference. The Instruction is applicable to B3D.

Preface

Thank you for purchasing B3D, electronic whiteboard. Please read this Instruction carefully, so as to realize the optimal performance and safety.

General

B3D electronic whiteboard is a set of advanced man-machine interactive equipment developed aiming at the demand and status quo of the electronic whiteboard market. It can be applied to various whiteboards, blackboards or smooth planes, change them into large touch screens with writing and touch functions which can be widely applied to fields of education, conference and military command. When being used together with computers, projectors or rear-projection, it can realize dust-free writing, arbitrary comment and other functions. With internet connection, its remote communication function can realize interactive remote conference, remote teaching system, remote consultation and other applications. In fields of multi-media interactive teaching, product demonstration, technical training, medical consultation, military commands and various conferences, B3D electronic whiteboard is playing a very important role.

By connecting the electronic whiteboard to a computer and using a projector to display the contents of the computer's screen on the electronic whiteboard, the following functions can be realized:

a. mouse simulation function

most hard and smooth plane can be turned into man-machine interactive interfaces of operable computers;

b. writing function

different pens (highlight pen, laser pen, etc.) can be used to write on the software interface, the written content can be saved, printed and replayed and the function of recognizing handwriting can be realized;

c. multimedia support function

multimedia such as video, image and flash are supported.

Highlight Features

1. Compared with the existing electronic whiteboards based on electromagnetic induction, pressure sensitivity, resistive film and other principles, B3D electronic whiteboard is characterized by flexibility, smart, portability and etc.

a. small shape like a remote control;

b. portable and less weight;

c. easy set-up: personnel with basic computer skills can install it after simple training.

2. Compared with the existing electronic whiteboard based on ultrasonic and infrared ray positioning technique, B3D interactive whiteboard makes a great progress in ultrasonic and infrared ray positioning algorithm.

a. No flying spot, no deformation and no time delay;

b. More accurate positioning, higher resolution and wider working range can be achieved;

c. A smart stylus pen can replace the mouse to control the operations of any programs of the computer;

d. The smart stylus pen can act as a pen to write on the electronic whiteboard directly and the written contents can be saved or replayed;

e. Any operating interface of the computer, such as pages of office/ website/ video/ program, can be directly marked, written and painted;

f. The B3D electronic whiteboard has such auxiliary functions as screen shooting, screen shielding,

highlighting, keyboard entry, handwriting recognition, etc;

g. The attached videotaping assistant software can videotape the board writing process and sound in standard avi format and generate video courseware rapidly;

h. The electronic pen has the hovering function and can simulate the sliding operation of a mouse.

About the Operating Instruction

There are 2 separated operating manuals for B3D electronic whiteboard.

For basic operation (this document)	Instructions for connecting and operating the electronic whiteboard, as well as instructions of installing structure.
For software (electronic document)	Instructions for the included electronic whiteboard software. Operating Instruction (for Software) is placed in the attached CD-ROM and can be read after the electronic whiteboard software is installed in the computer. For detailed information about manual viewing, please refer to "Electronic File Viewing".

Abbreviations

Windows® refers to the Microsoft® Windows® operating system.

Windows® 2000/XP/VISTA/7 refers to the Microsoft® Windows® 2000/XP/VISTA/7 operating system.

Trademarks

Microsoft, Windows, DirectX and PowerPoint are registered trademarks of or trademarks of Microsoft Corporation in the United States and/or other countries.

Intel and Pentium are registered trademarks of or trademarks of Intel Corporation in the United States and/or other countries.

Adobe and Reader are registered trademarks of or trademarks of Adobe Systems Corporation in the United States and/or other countries.

All other trademarks referred to herein are the property of their respective owners.

Warning about Data Saving

When the memory device of the system or any selected memory device are adversely affected by faulty operation, static, electrical noise, vibration, dust, etc. or are powered off due to faulty operation, repair or negligence, the contents saved may be lost or changed. Please read the operating instruction and the notes in help information before operating the system, and observe the notes during the operation.

Please seriously observe the following notes:

Make sure the backup or original files of all important data have been saved.

The manufacture hereby declares that, it takes no responsibility for loss or change of any data saved in the soft disc, hard disc, optical disc or other memory devices.

System Requirements

CPU	Pentium® III processor or more advanced one
Operating System	Windows® 2000, Windows® XP, Windows® 7, Linux, Mac
Interface	At least one USB interface
Memory (RAM)	Windows® 2000: 512 MB or larger Windows® XP: 1GB or larger (Windows® XP) Windows® vista: 2GB or larger(Windows® vista) Windows® 7: 2GB or larger (Windows® 7)
Hard Disk	Hard disk with at least 300MB of free space (not including the space required for saving files)
Others	CD-ROM driver, DVD-ROM driver or Internet connection

Applicable Scope

- Writing surfaces: regular whiteboard, magnetic blackboard, rear projector, glass plane, table top, wall and other smooth surfaces.
- Display screen: 20 inch - 100 inch
- Working condition: temperature: 10°C - 35°C, humidity: 15%-85%
- Storage and transportation condition: temperature: -40°C - 85°C, humidity: 5%-95%

Note: Long-time storage under ultra-high or ultra-low temperature may affect the service life of ultrasonic electronic whiteboard equipment and batteries.

Disclaimer

The factory takes no responsibility for any accident or personnel injury caused by the following circumstances, including but not limited to:

1. equipment modification or improper installation;
2. the equipment is applied beyond the expected purposes;
3. earthquake, fire, flood, tsunami, cyclone, lightning or other nature disasters.

Safety

In order to avoid severe personnel injury, before operating the machine, please read the content of this Section carefully, so as to ensure correct and safe operation.

The following graphic symbols are used herein.

	Warn the operator not to carry out certain operation.
	Warn the operator to observe certain operating steps, so as to ensure safe operation.

Installation and Movement

-  The machine can only be installed by qualified technicians.
-  The machine not in use should be removed, so as to prevent it from falling off.
-  Do not install the machine at a unstable place.
-  Do not place the machine in a damp, hot and dusty environment. Long-time storage of the machine under such adverse condition may cause fire or electric shock.
-  In order to avoid fire and electric shock, do not place the machine in rain or any damp environment.

Safety Instructions

-  **Asphyxiation Hazard**
Put the battery out of children's reach, so as to prevent them from being swallowed.

Battery

-  Only batteries of specified model can be applied. Application of batteries of improper model may cause overheating of cells/personnel burn or leakage of cell acid liquor.
-  Make sure the battery electrodes are correct when installing batteries. Improper installation of batteries may cause explosion and leakage, thereby resulting in personnel injury.
-  Do not use worn-out or damaged batteries, or leakage may occur.
-  Do not charge, short-circuit, heat or damage the batteries or throw them into fire, or leakage, heat discharge or explosion may occur.
-  The batteries should be discarded only after their contacts are covered by insulating materials (such as adhesive tape). If a battery is in direct contact with other batteries, leakage, fire or explosion may occur.

Do not weld the batteries, or leakage, heat discharge or explosion may occur.

When the electronic pen is not in use for a long time, the batteries should be removed, or the battery seepage will occur.

Operation

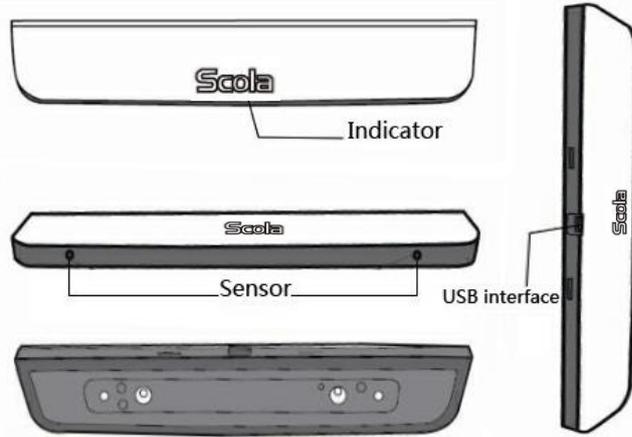
Accessories

Please check below accessories in the package, if missing, please contact the dealers. B3D contains the following components:

Number	Part Name	Picture	Qty.	Remarks
1	Receiver		1	
2	Metal Fixed Plate		1	
3	Electronic pens		1	Standard configuration
4	Penpoint		5	
5	USB cable (5m)		1	For computer connection
6	Disc installation		1	The content of the disc includes: a. operating instructions b. application program software.
7	Instruction Manual		1	In the Disc installation

Names and Functions of Various Parts

Receiver



Color of indicator	Status of receiver	
	Connection	Working
Red	Unsuccessful	Electronic pen is not working or out of the working area
Green	Successful	Electronic pen is working normally in the working area

Since the receiver is an important part of the product, please take care in application to avoid falling or collision.

There is a magnet at the bottom of the B3D's receiver, it can be attached on the metal panel; while using on the non metal surface, please use our metal fixed plate.

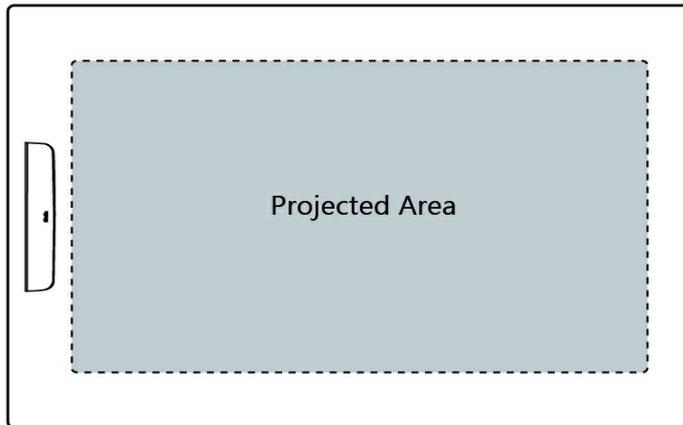
Logo of B3D is a device working status indicator.

Fixing position of receiver

The fixing position of receiver directly affects the normal working of the electronic pen. Please refer to the below Diagram of Correct Installation Position.

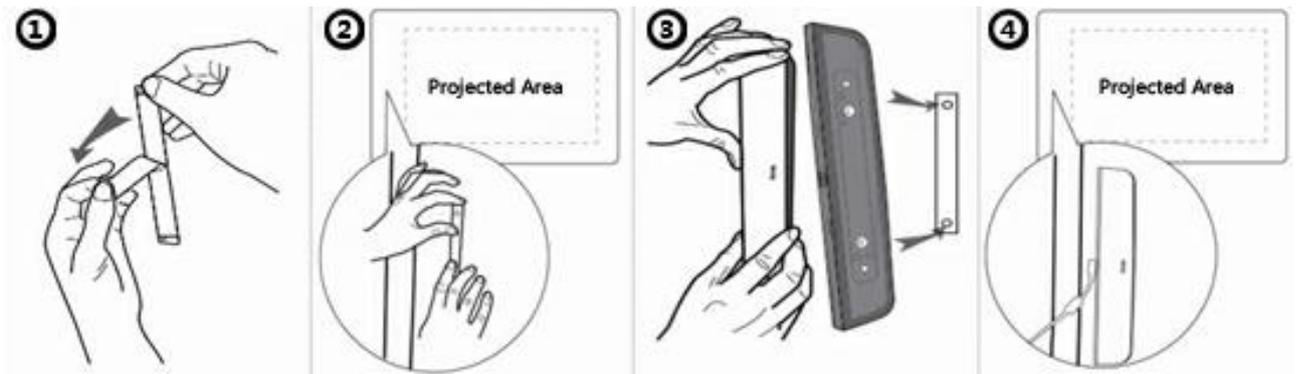
Adjust the projector, make the projected area a normal rectangle. The maximum of the projected area is 1.2x2.1m, the most effective writing area is 30inch-80inch, (please refer the manual of projector and this manual of setting the projector on page 19-20.)

1. The distance of the sensor of the receiver and the projected area is 6cm.
2. The receiver is fixed vertically to the middle of the left of the projected area.



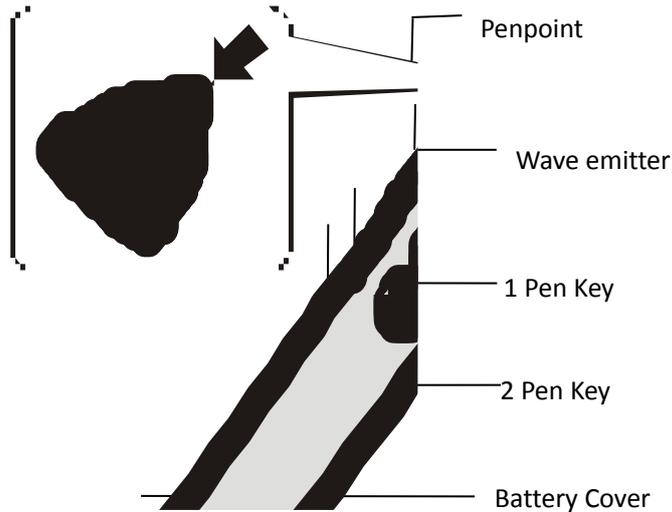
Metal fixed Plate

While install B3D on the non metal plate, please use our metal fixed plate. At the back of the metal fixed plate, there is a sticker, please remove the protective film, and stick the metal fixed plate on the surface you required, a magnetic is used to connect the receiver and the metal fixed plate. Please refer below images:



1. Tear the self-adhesive protective film at the back of the metal fixed plate.
2. Stick vertically the metal fixed plate to the middle of the left projected area.
3. Attach the magnet on the metal fixed plate, please note that the positioning holes are at the bottom of the receiver, should be installed accordingly with the positioning column of the metal fixed plate.
4. Please check and confirm the installation of B3D is firm.

Electronic pens



Penpoint
The penpoint will emit ultrasonic wave and infrared signal when pressed down, which is equal to the left button of a mouse is clicked.
Ultrasonic wave emitter
Do not cover the area with fingers, or the electronic whiteboard cannot accurately detect the position of the electronic pen.
Pen key 1
Serving as left mouse button
Pen key 2
Serving as right mouse button
Battery cover

● Caution

- Try to write on the screen board with vertically-held electronic pen.
- Holding the electronic pen in other angles may cause error in working.
- Do not use several electronic pens simultaneously, so as to avoid faulty operation.

● Notes

- The penpoint can be replaced by pinching it and pulling out forcefully.
- The electronic pen has the function of preventing mistaken trigger; when the penpoint or two pen keys are pressed down to make the electronic pen work for 2.5 minutes constantly, the electronic pen will automatically stop working.
- When operating the electronic pen, you will hear buzzer, which means the electronic pen is emitting ultrasonic wave to detect the position. The buzzer will not adversely affect the surrounding people or equipment and also will not cause electronic shock.

Setup and Application of Hardware Environment

B3D portable interactive whiteboard can be converted the hard surface into interactive whiteboard, most suitable surface of area is 30inch-100 inch.

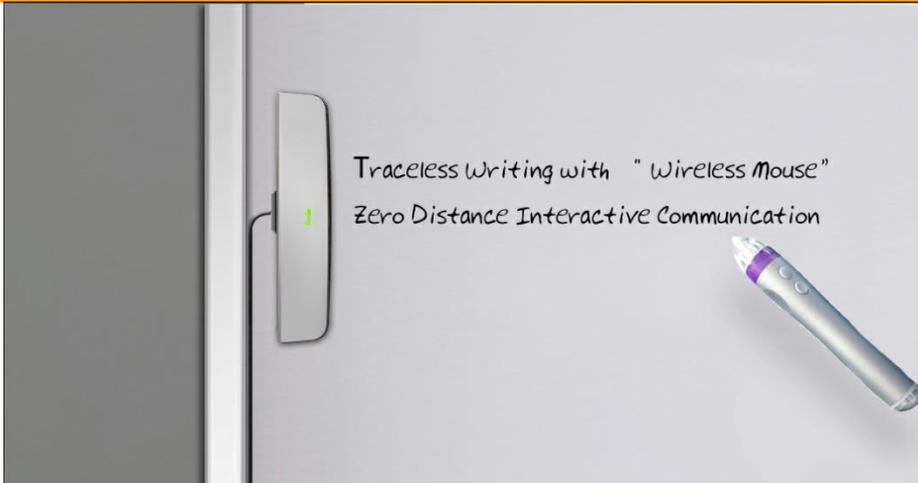


diagram: B3D was installed on the common board

Prepare to install

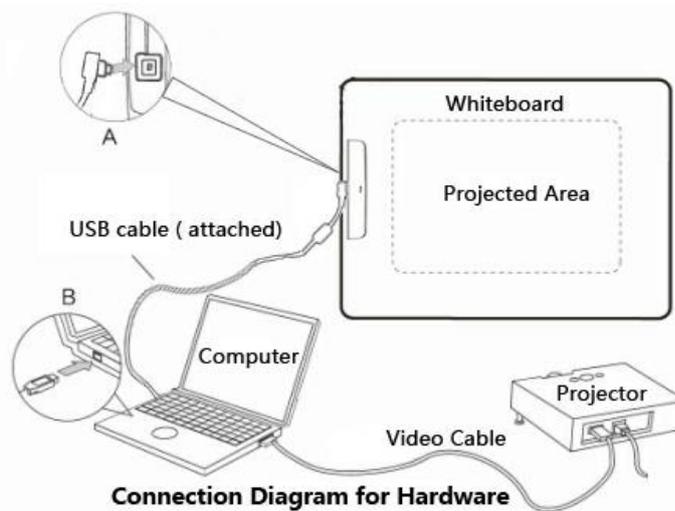
B3D portable interactive whiteboard can be applied to a ceramic steel whiteboard, and most display screens. Before installation, please pay attention to your device and observe the following notes:

1. If a projector is applied to connect the whiteboard and the computer, please make sure the image generated by the computer is projected on rather smooth and hard surface (such as blackboard, whiteboard, wall, glass and other media) and pay attention to the position of the image projected.
2. For ease of device connection, please pay attention to the height of the display area (better to be not higher than 2.5m) and the distance between the computer host and the display area (better to be less than 5m).

Here is connection diagram for using the projector through application of projection equipment.

(1) Use (attached) electronic computer.

- Receiver: Micro USB into the electronic
- connector the USB



USB cable to connect the whiteboard and the

the connector of the of the B3D is inserted Micro USB port of the whiteboard.

Computer: the of USB is inserted into port of the computer.

(2) Connect the computer to the projector.

- For description of connection between the computer and the projector, please refer to relevant Operating Instruction.

About Application Position

- Do not place the electronic whiteboard near stoves and cold/ hot air vents or at positions exposed to strong wind.
- Do not apply the electronic whiteboard at places with temperature lower than -4°C or dramatically changing.

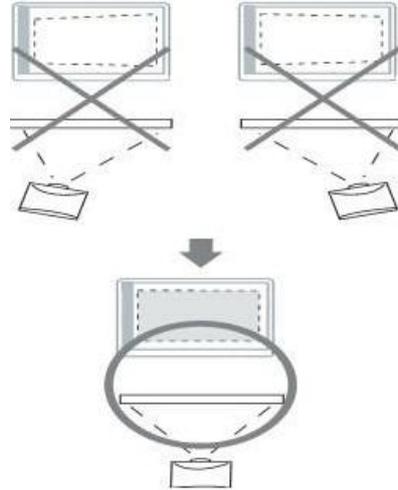
Note 1: Electronic whiteboard may not operate normally under the above-mentioned environment.

Note 2: The strongest feature of B3D is using it converting the smooth and hard surface (such as common whiteboard) into interactive whiteboard, do not required extra power supply, please do not provide extra power supply for this model

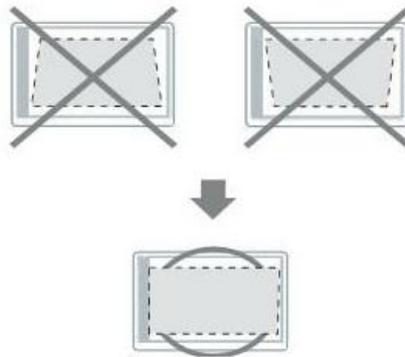
Projector Setting

Take rectangle projected image as an example.

- Adjust the position of the projector, so as to project the image on the electronic whiteboard at right angle.



- If the image is projected in trapezoid, the position of the electronic pen may not be read correctly. Adjust the projector until the image becomes rectangle. For information about adjustment of projected image, please refer to the instruction of the projector.



Setting of Correct Resolution

- Set most suitable resolution for the computer and the projector. If the resolution is set incorrectly, it will be difficult to see the image. Especially, if the resolution of the projector is lower than that of the computer, the filament will switch off the display. For information about adjustment of resolution, please refer to the instruction of the projector.

Do not look at the projection lamp directly.

- When using projection lamp, do not look at it directly, or your eyes may be damaged.

System Setting (Calibration)

About Calibration

As the projected image changes in size from time to time, calibration should be conducted before using

the projector. Through calibration, the size of current projected image is transferred to the electronic whiteboard software, so as to make sure the software responses to the operation by user at accurate position.

Calibration Method

There are two ways for calibration:

E-pen calibration: using E-pen to enter or quit the calibration mode.

Software calibration: using PC software to enter or quit the calibration mode.

Notice

Hold the pen tightly, click calibration points as vertically as possible.

When the pen point or button 1 or button 2 is pressed, the pen will come to one short beep voice.

Please use one AA battery in E-pen.

Calibration points come out one after another when the right positions confirmed.

In calibration mode, if there is no operating from E-pen for over 30 seconds, B3D will beep twice and quit calibration mode.

In normal mode, pen point of E-pen equals to mouse left button in function, button 1 of E-pen equals to mouse left button in function, button 2 of E-pen equals to mouse right button in function.

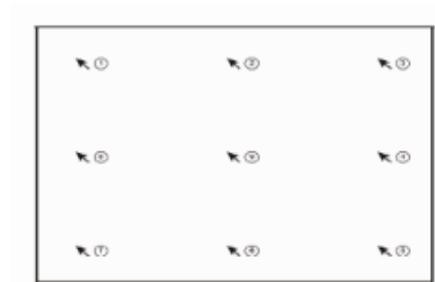
After Calibration

Do not move the receiver or the projector.

E-pen Calibration



Receiver



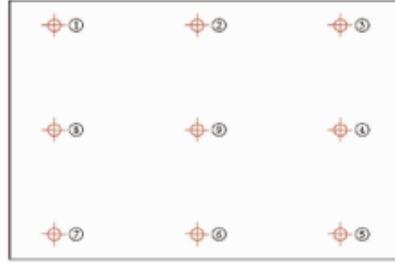
Projection screen

1. Use USB cable to connect B3D receiver to computer.
2. As in picture, press E-pen button 2 for more than 3 seconds in any position which in receiver point 2cm radius half circle(half circle zone shown in picture), B3D will have a long beep once, then enter calibration mode, at the same time, point in screen com to first calibration point.
3. As in picture, the arrow points to a position of calibration point, click the point with pen point, if point is confirmed by receiver, B3D will have a short beep, and then the point in screen will come to next calibration point. After all 9 calibration points confirmed, B3D will beep three times and save the calibration data, then finish and quit calibration mode.
4. If any wrong operation appeared in calibrating, press button 1 for more than 2 seconds, B3D will have two short beeps, and quit calibration mode at the same time.

Software Calibration



Receiver



Projection screen

1. Use USB cable to connect B3D receiver to computer.
2. Run the calibration software (in the attached CD).
3. As in picture, according to the points appearing order, click the center of every calibration point, if the point is confirmed, it will move to next point. After all 9 points confirmed, B3D will save all calibration data, quit the calibration mode at the same time.
4. If any wrong operation appeared in calibrating, press mouse left button, or press E-pen button 1 for more than 2 seconds, B3D will have two short beeps, and quit calibration mode at the same time.

Appendix

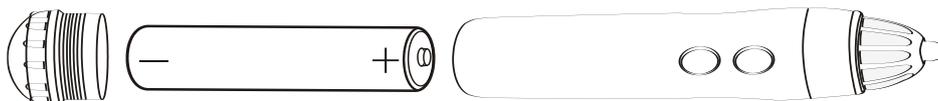
Replacement of Battery in Electronic Pen

When the battery in the electronic pen is low in power, please replace it as soon as possible, or the performance of the electronic pen will be affected. For detailed description of replacing battery, please refer to "Battery Insertion (Replacement)".

- Immediately take out the used battery and dispose it according to local laws and regulations.

Battery Replacement

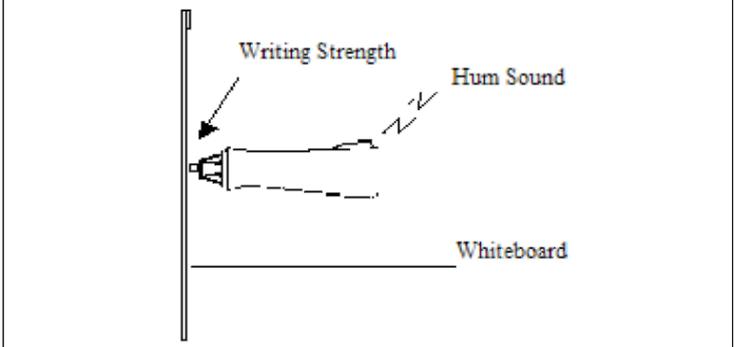
1. Take down (put back) the battery cover. When putting back the cover, please follow reverse steps.
2. Insert (replace) the battery and then put back the cover. Please use AA alkaline battery (#5) and make sure the battery electrodes are correct.



Trouble Shooting

When you think there is a problem, please operate as the following steps in the table. If the problem still cannot be solved, please contact the dealer.

Problems	Possible Causes and Solutions
Computer does not recognize Whiteboard	<ul style="list-style-type: none"> • power supply of the electronic whiteboard isn't turned on → turn on the power supply of the electronic whiteboard • USB cable is not connected → properly connect USB cable
Cannot correctly detect the location of electronic pen	<ul style="list-style-type: none"> • position of electronic whiteboard or projector is changed • zoom or resolution response of projector has been changed → make calibration again
	<ul style="list-style-type: none"> • the electronic pen is being held at certain angle • Sunlight or bright light project directly on the screen • the remote control is pointing at the whiteboard receiver • The side face of the whiteboard near wall or its top side close to the ceiling • The whiteboard is placed near air conditioning vents • Plasma TV is in use near the whiteboard • The whiteboard receiver is covered • The electronic pen's transmitter is covered by your hand • Two or more electronic pens are in use at the same time <p>→ Check whether the problem is caused by the above reasons; If the offset problem is not caused by the above mentioned reasons, please perform calibration again.</p>
Computer screen shows "low battery capacity!! Please replace the electronic pen's battery as soon as possible."	→ Replace the battery of the electronic pen that shows such information.
How to extend the signal pen's battery's life?	→ Please remove the battery if the signal pen will not be used in long time.
What's the difference between creating a document and creating a new page?	For B3D electronic whiteboard, each document can be constituted by a number of pages. Therefore, create a new document is equal to open a new paper file, and create a new page is equal to put a new page in the paper file.
How to properly use the	When using signal pen, users may refer to figure 1 below.

<p>signal pen?</p>	<ol style="list-style-type: none"> 1. Note the following three matters: <ol style="list-style-type: none"> a. When writing on the whiteboard with signal pen, appropriate writing strength is required to ensure the signal sent writing signals (only requires when human ear presses close to the pen a slight hum can be heard in writing process). b. When writing on the whiteboard with signal pen, please try to ensure that the pen is vertical to the whiteboard (within $\pm 15^\circ$). c. When writing on the whiteboard with signal pen, your finger holding the pen shall not go beyond the pen's color ring, to ensure that the writing signals the pen sent will not be covered.  <p>Figure 1: Properly use the signal pen</p>
<p>What to do when it shows "connection error, not found appropriate equipment"</p>	<ol style="list-style-type: none"> 1. check whether the hardware indicator light is light (if not, check the hardware installation); 2. check whether the connection of the data lines to the data interface is correct and firm; 3. manually connect the hardware
<p>The signal pen sent signals all the time</p>	<p>Please contact the supplier.</p>

After-Sales Service and Technical Support

After-Sales Service Guidance

Technical Parameters

1. Product dimension: 227mm x43mmx11mm
2. Product weight: 100g
3. Maximum writing area: 1.2m x 2.1m
4. System tracking speed: > 3m/s
5. System resolution response: 0.1mm
6. System operating temperature: 10°C~35°C
7. Continuous working hours of signal pen: above 2000 hours (1.5V AA alkaline batteries)

After Service Guide

1. The warranty period of the product is three (3) years, if any natural fault (not caused by human damage or improper use) happens to the product during warranty period, please contact the dealer, and the company will repair it free of charge;
2. For failures happens beyond the warranty period or failures caused by operation or improper use during the warranty period, the company will be responsible for repair while charging required maintenance cost;
3. During the application, the users are not allowed to disassemble the B3D electronic whiteboard without approval; otherwise, the company will not be responsible for repair;
4. Users shall promptly return the warranty card to the company; otherwise, the company will not be responsible for warranty repair.

Technical Supports

Please contact us through the following manner to get technical support if problems arise during operation.

Please provide us with the following information when calling:

1. time and manner of buying the product and provide the receipt
2. product name and model
3. product fault message

Thank you again for choosing and using B3D Electronic Whiteboard!