3DJumpBean Wireless Whiteboard T618 Plus User Guide

Contents

1   Overview

Leadingedge 3DJumpBean Wireless Whiteboard T618 is a fully featured portable wireless interactive Whiteboard system that enables interactive teaching from anywhere in the classroom. The interactive Pen (ePen) is integrated with a ballpoint that allows users to write on standard A4 size paper and interact with software applications simultaneously.

Disentangle from connection cables and master wireless interactive presentations with the 3DJumpBean Wireless Whiteboard T618 system. Utilizing exclusively enhanced 2.4GHz RF wireless technology, the 3DJumpBean Wireless Whiteboard T618 connects to a computer and feeds real time demonstrations on its active area onto the computer screen or projected screen, when used with a data projector.

Connect multiple 3DJumpBean Wireless Whiteboard T618 to the same computer, creating a truly interactive teaching / presentation environment. With the 3DJumpBean Wireless Whiteboard T618, teachers can walk around the classroom and present various topics, highlight and annotate on the active area.   Students become much more engaged as they can also give real time contributions to the lesson. This same resourceful setting can also be used in business meetings, seminars, product demonstrations, and exhibitions.
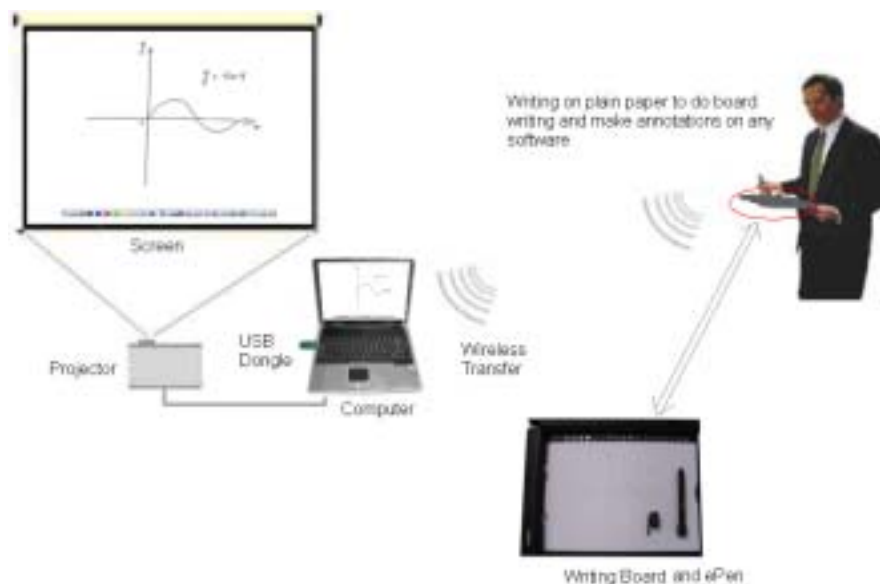
2   Features

1.   Powerful PowerPoint presentations – write, highlight and flip the pages during PowerPoint slide show mode. Support both right-handed and left-handed writings.

2.   Smooth wireless connectivity – 2.4GHz RF proprietary communication system to ensure a smooth connection.

3.   Supports multi-user mode – configure a whole class interactive solution or group meeting. Control right is switched freely.

4.   Standard A4 size writing area – realistic writing space writing on real paper in real ink!

5.   Superior positioning precision up to 0.1mm.

6.   Onboard operation icons – provides instant access to on-screen shortcuts by touching with the interactive ePen.

7.   'Print to Match' function – a unique feature that enables users to write on the print out and match to the display easily.

8.   Ultra low power consumption – prolong the continuously working time.

9.   Whiteboard mode for workshop or teaching – an image library is also provided to prepare content easily.

10. Ultra portable and lightweight (200g with batteries).

3   Specifications

Items	Description
USB Receiver Interface	USB V1.1
USB Connector	Standard USB connector
Maximum Connection Numbers	128 wireless terminals
Wireless Frequency	2.4GHz RF
Wireless Transfer Rate	1.0MB/second
Effective Transmission Distance	>10M
Writing Area	250 x 200 mm (10" x 8")
Writing Medium	A4 sheet or on the board directly
Positioning Technology of Interactive ePen	Ultrasonic positioning
Interactive ePen	Common ball pen refill or plastic pen refill Length 67mm, diameter 2.28mm
Button on the Interactive ePen	One button, as right mouse button
Size of Interactive ePen	Length 140mm and diameter 15.5mm
Power Supply of Interactive ePen	1.5 V AG13 x 3
Power Consumption of Interactive ePen	Operation <0.9mA Standby <10uA
Report Rate	62 points/second
Positioning precision	0.1mm
Height of interactive ePen above writing board	Maximum 50mm
Size of Writing Board	315 x 255 x 20 mm
LEDs of Writing Board	Working status LED is green and flickers while writing, Low power LED, red when low power

Buttons of Writing Board	Reset Wakeup 18 soft keys for operation of application
Power Supply of Writing Board	2 x AAA (1.2V) batteries 30 hours for consecutive usage if using 700mAh rechargeable batteries *To get max usage hours it is strongly recommended that user use rechargeable AAA batteries
Weight of Writing Board	200g (with batteries)

4   Product Package Contents

Name	Quantity	Description
Writing Board	1	To offer writing area and transmit writing signals to USB receiver
USB Receiver (Dongle)	1	To receive writing signal and transmit signals to PC software
Interactive ePen	1	To generate pen position signal (writing, move and button), and send signals to writing board
AG13 Button Cell	3	Standby battery for interactive ePen
AAA Battery	4	Battery for writing board (2 extra batteries for standby)
Ball Pen Refill	3	To write on common paper
Plastic Pen Refill	1	To write on the writing board directly
Iron Clamp	1	To use for replacement of pen refill
USB extended cable	1	Connect to USB receiver when necessary
Software CD	1	Installation disk of wireless Whiteboard application
User Guide	1	This instruction file

5   Hardware Installation

5.1.   Installation of USB Receiver

After the driver installed (which is automatically installed when Wireless Whiteboard software is being installed), insert USB receiver into USB port of computer, and LED on USB receiver lights up, indicating it is ready to use.

5.2.   Writing Board

1.   Installation of battery: set two AAA batteries in the battery container in the bottom of writing board, and control battery power via power switch.

2.   Power switch: The switch on the left side of writing board is power switch; switch it to ON or OFF to control power supply.

3.   LEDs: The green LED is the operating-mode indicator. It is green when there is power, and flickers when there is writing. The red LED is low power indicator. It lights up when battery power is low, prompting the user to replace batteries.

4.   Reset (Wakeup) key: the elliptic key on the top of writing board is Reset (Wakeup) key. Function: the writing board automatically enters energy-saving (sleep) mode when it is not used in about 5 minutes, the LED goes out. To re-enter operating mode, press the key.
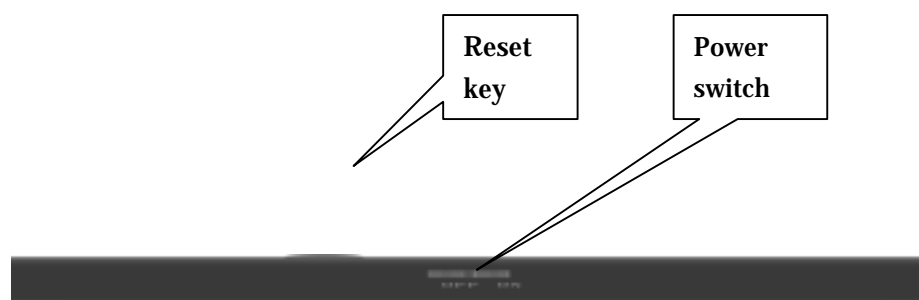
Fig. 1. Complete set of Wireless Whiteboard

Fig. 2. Interactive ePen (ePen)

6　Software Installation

6.1.　System Requirements

◆　　Microsoft Windows 2000/NT/2003/XP
◆　　Pentium III processor or above
◆　　Minimum 50 MB free hard disk space
◆　　128M memory
◆　　16X CD-ROM
◆　　USB port
◆　　VGA card that supports 16 or 32 bit display color
◆　　Minimum screen resolution 800X600

6.2.　Installation of Application Software

1. Do not connect USB Receiver before software installation.
2. Insert the disk supplied with the product into the CD-ROM, the installation will be launched automatically, (please run Setup.exe if auto-run of your system does not process), and the screen displays application setup wizard.

3. Click Next to start installation of the application;
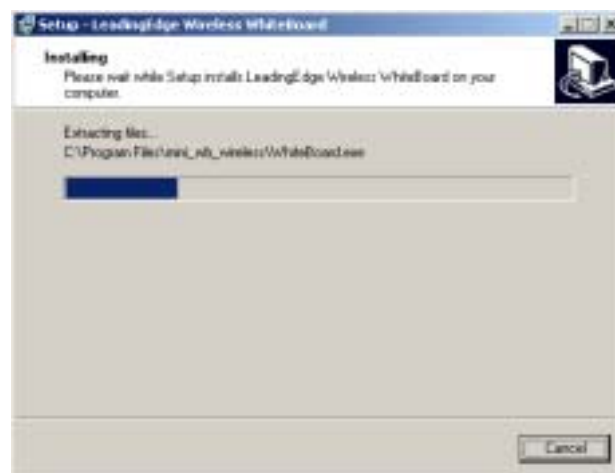
4.   Finally, install USB driver automatically.

5. When installation completed a shortcut icon appears on the desktop.

6. Insert USB receiver into USB port, the LED on USB receiver lights up.

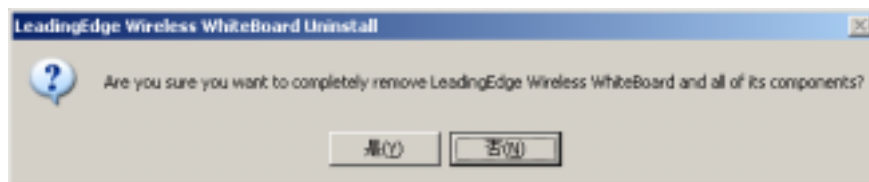7. Startup the Wireless Whiteboard software: Double click the icon on the desktop.

6.3.   Uninstall Wireless Whiteboard Software

1. Select All Programs in Start menu, and then Wireless Whiteboard.
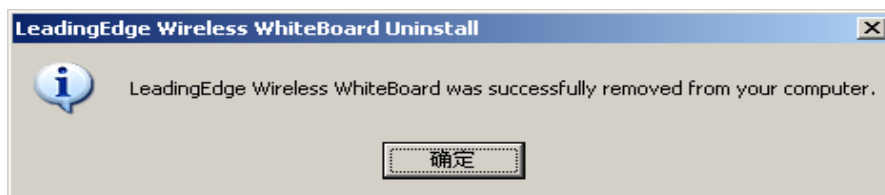
2. Select the item Uninstall Wireless Whiteboard. .

3. The following dialog box pops up:

4. Select Yes to uninstall this software. After completion the following dialog box pops up:


5. Click OK to complete uninstall.

7   Operation of Software Functions

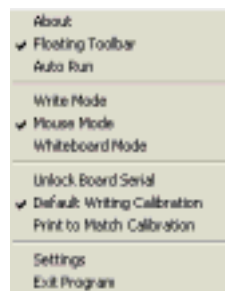**7.1.   Single User Board ID Matching Operation**

Transmission of handwriting signal from wireless interactive whiteboard to receiver is carried out through 2.4GHz wireless RF protocol. USB receiver should recognize which writing board is sending signal, so as to properly transfer to application for processing. This overall process is called Board ID Matching. The following steps illustrate the process:

1) Insert USB receiver into USB port and the LED on USB receiver lights up, then run the wireless whiteboard software. Switch on the power of writing board or press the Reset (Wakeup) key if under energy-saving (sleep) mode and the computer screen pops up the dialog box as follows:

Board ID detected by system
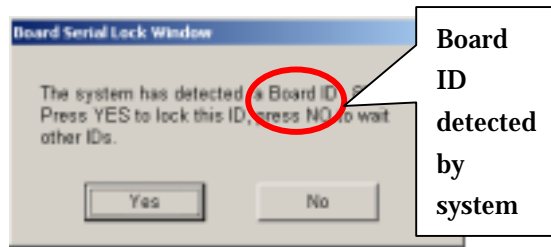
2) Board ID 822 is the board ID number the system had just detected. If this ID number equals to the ID number labeled on the back of writing board, press Yes or directly press Enter key on the keyboard. Then activate interactive pen, move it on the writing board. If the mouse cursor moves according to pen move it indicates that the matching process is completed and it is ready to use.

3) If this ID number does not equal to the ID number labeled on the back of writing board, press NO and the system would automatically detect another ID number. When another ID number is detected, above dialog box pops up, then operate as Step 2. If you select NO carelessly, pull out USB receiver and insert it again.

4) If the computer needs to use a writing board with another ID number, pull out USB receiver first and then switch on power supply of writing board, or press Reset (Wakeup) key if under energy-saving (sleep) mode, then insert USB receiver again, then repeat Step 2.

5) If binding of ID number need to be removed and you don't want to disconnect USB receiver (pull out and insert again), left click the tray icon on the system toolbar (tray) menu, the following menu

pops up, click Unlock Board Serial and the system would return to Step 2.

(Remarks: 7.2. Multi-user Switch Operation is more easy for you to switch board ID)

6) After ID matching operation completed, the working ID will be displayed at the end of toolbar.


7.2. Multi-user Switch Operation

Every wireless whiteboard has a unique ID number. User switch refers to switch software control right from one writing board to another. There are two types of switch operation: Guidance Mode Switch and Meeting Mode Switch. To enter the two types just click the "switch" button on the toolbar. The following pop-up menu will appear:


9
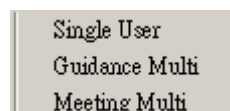
7.2.1. Guidance Multi-user Switch Operation

The first writing board obtaining control right is named as Master, whose ID number is the first number locked after the software is running. Specific switching operation sees as follows:

8   The software runs for the first time after Windows activated or operation of pull out and insertion of USB receiver is completely same with single-user operation.

9   Software toolbar include a switch button, and displays currently activated ID number.

Activated Board ID
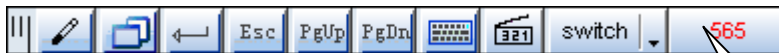
10   Press the switch button, the following dialog box pops up:

List of ID number

Return the right to Master ID
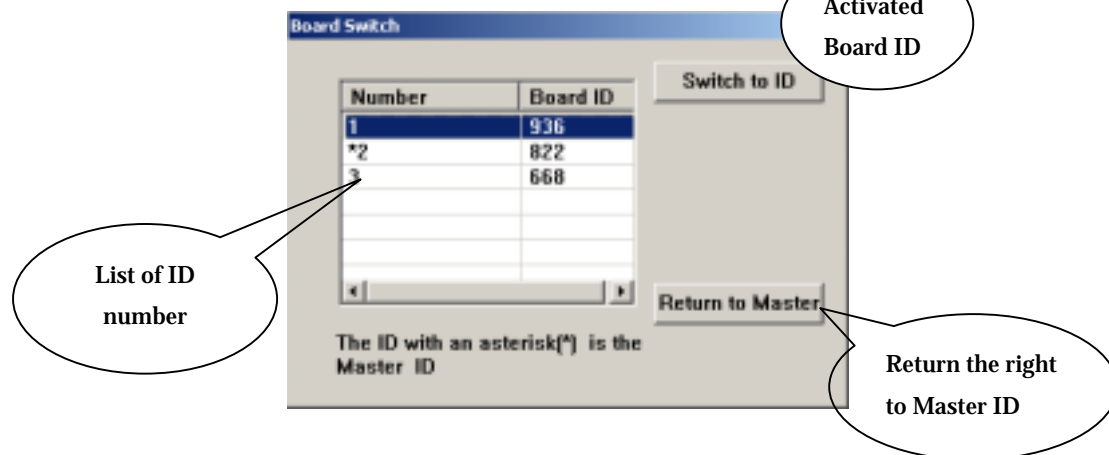
11   Select a ID number in the list, click Switch to ID, it would switch to corresponding ID number automatically.

12   Two methods to return control right to master ID number: 1: current ID operator clicks the Switch button, then selects Return to Master; 2: current ID operator inserts the interactive pen into the plughole on the board, and the master ID user operates with mouse to click Return to Master.

7.2.2. Meeting Multi-user Mode Operation

Meeting Multi-user mode indicates that all the existing boards are equal when applying control right. To enter Meeting Multi-user mode just select Meeting Multi on the pop up menu. The toolbar will be like this:
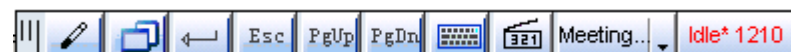
Current Wring Board ID and

There are two types of switching status: Idle and busy.

✧   Idle status indicates that other boards can apply the control right by clicking the RH icon on top

right of writing board.

✧ Busy status indicates that other board can not apply the control right until the status become idle.
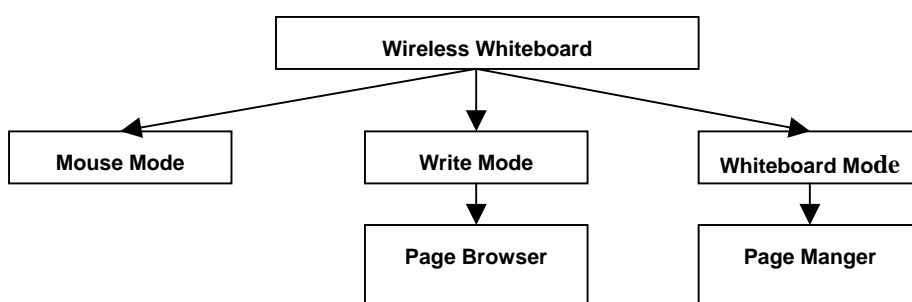
There are two ways to enter Idle mode

✧ Time has elapsed for 15 seconds after the board gaining control

✧ The user in control clicks the [RH] icon

There is only one way to enter Busy mode: Board user pen-clicks the [RH] icon before 15 seconds have elapsed.

7.3. Operations of Software Interactive Functions

7.3.1. Introduction to Overall Functions

```
                    ┌─────────────────────┐
                    │ Wireless Whiteboard │
                    └─────────────────────┘
          ┌──────────────────┼──────────────────┐
          ▼                  ▼                  ▼
 ┌─────────────┐    ┌─────────────┐    ┌─────────────────┐
 │  Mouse Mode │    │  Write Mode │    │ Whiteboard Mode │
 └─────────────┘    └─────────────┘    └─────────────────┘
                           ▼                  ▼
                    ┌─────────────┐    ┌─────────────┐
                    │ Page Browser│    │ Page Manger │
                    └─────────────┘    └─────────────┘
```

-Has basic functions
  of a wireless mouse

-Interactive ePen clicking
  equals to left mouse
  button, pressing the
  button on the pen
  equals to the right
  mouse button

-Make annotations in any software
  interface

                    Whiteboard

-Powerful PowerPoint presentation
  function, convenient for operation

-All pages are automatically saved
  and ready for future use or

-Activate Whiteboard function
  to write on interactive

-To save handwritten content
  for future use (electronic
  lesson preparation function)
-To import pre-made pictures
  or figures from Teaching
  Image Lib in Whiteboard
  Mode to enrich the teaching
  or workshop

7.3.2. Three Methods to Operate Whiteboard Software

1   Toolbar operation: In every mode, there is a toolbar on the bottom of the   screen.   Use the toolbar
     to realize various software operations.

2 Soft keys on the writing board: Soft keys correspond to the toolbar. Both have same operation effect. Directly click them with the pen to facilitate operation.

3 System toolbar (tray) menu: left or right click the tray icon. .

7.3.3.　　　Description of Mouse Mode and Toolbar

: switch to Write Mode;

: switch to Whiteboard Mode;

: correspond to Enter on the keyboard, to turn to next page when demonstrating PowerPoint;

Esc: cancel operation;

PgUp and PgDn: correspond to <Page Up> and <Page Down> separately;

: open / close on-screen keyboard;

822 : switch button / current ID display.

7.3.4.　　Description of Toolbar in Whiteboard Mode

: switch to Mouse Mode;　: switch to Whiteboard Page Manager;

The first five items are to select colors of pen, and the last three items are to select pen width and eraser

width. — fine, ▬ medium, ■ thick;

 is to select the width of pen or eraser by directly dragging;

: pen for free writing;　: eraser to erase handwriting;

: select picture for operation. When a picture is selected, you can resize, move, delete, etc.;

: cancel the last operation without restriction;

: open/close picture library selection dialog box;

: clear all the contents of current page;

: create a new page, turn to previous or next page separately.

7.3.5.   Operation of Teaching Image Lib in Whiteboard

Teaching Image Lib supports all formats of pictures. Other formats can be converted to WMF format automatically and save in the directory selected. Wireless interactive whiteboard software has common teaching library that are divided into subject category and can be transferred directly in the whiteboard. This process is described as follows:

1.   The following image lib dialog box pops up: press the icon ⬤ in the toolbar, the following library dialog box pops up :
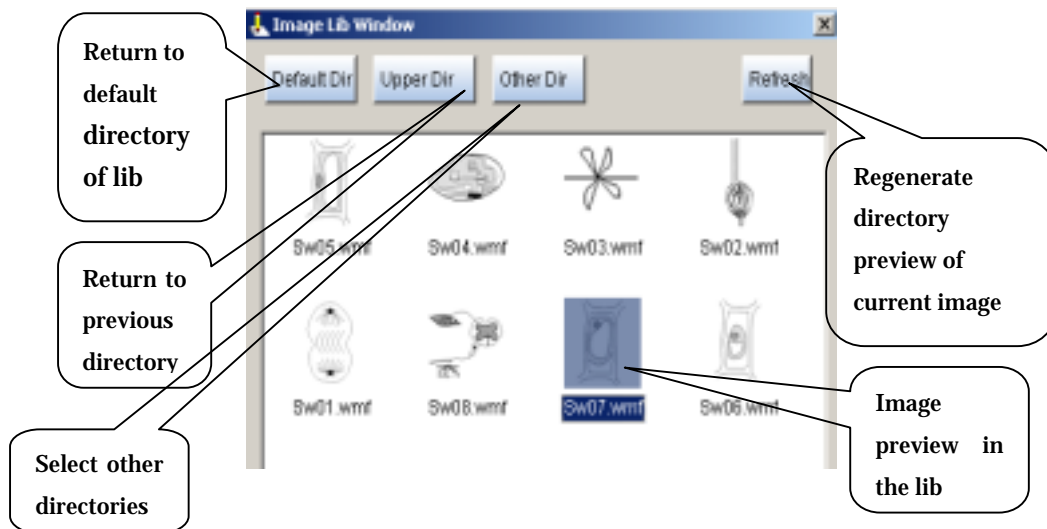

2.   Input the library figure on the whiteboard: click the figure in the library, point to the position desired in the whiteboard and drag the cursor to get a desired size, then withdraw pen to complete, shown as follow:
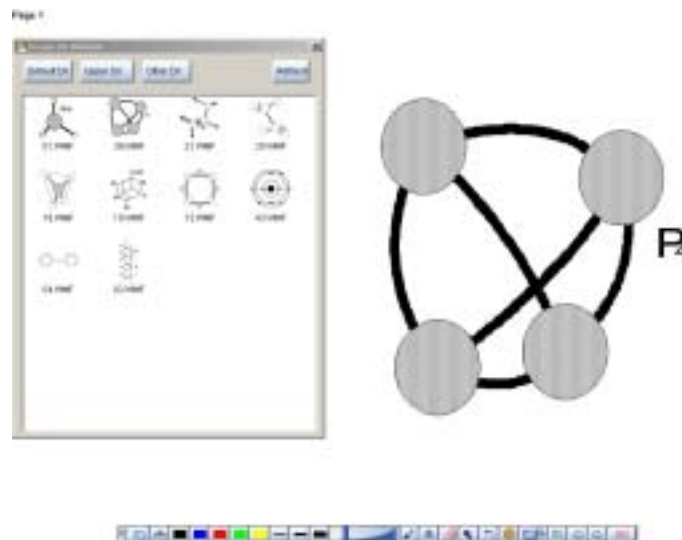
3. Cancel image input: click the icon in the display of lib selection dialog box to cancel image input operation.

4. Move image input dialog box: press the button on the pen to move the lib selection dialog box to draw figures anywhere on the whiteboard.

5. Select a figure: press the button on the toolbar, then left click the image to operate, showed
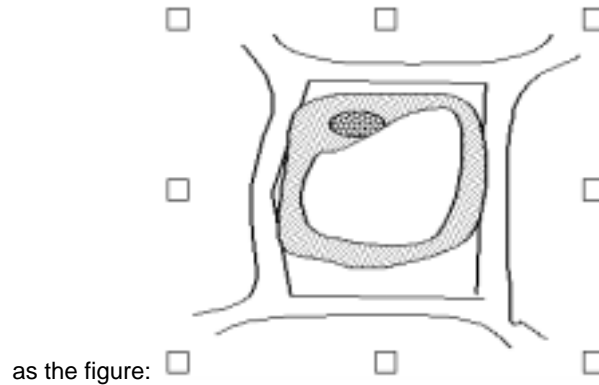
as the figure:

6. Move, resize and delete figures input: drag the figure to move; move the mouse to a selection point around the figure and drag the point to resize the figure; press DEL key on the board to delete the figure selected.

7. Exit library status: to close lib selection dialog box, or click the icon on the toolbar again.

8. Open images in other directory: select Other Dir to open the directory of another pictures, press Refresh to show all images. Formats supported include gif, bmp, jpg and png.

7.3.6.   Description of Toolbar in Write Mode

: switch to Mouse Mode; : switch to Whiteboard Mode;

: enter page browser to save or browse pages;

The first five items are to select colors of pen, and the last three items are to select pen width and eraser

width. fine, medium, thick;

: pen for free writing; : eraser to erase handwriting;

: highlight pen (background transparent), one width 10, the other width 20;

: select more colors; : create a new annotated page;

: save current page to image format; : clear all the contents of current page;

: switch to previous or next page (create a new page).

7.3.7. Operation Write Mode in PowerPoint Play Mode

When doing presentations with PowerPoint slide show, the lecturer can make annotations or explanations on the PowerPoint pages, and controls turnover of the PowerPoint slide. These operations require two working modes of wireless interactive whiteboard, shift between Mouse Mode and Write Mode. To facilitate users' operation, we have set a set of shortcut button and in Write Mode for PowerPoint.

Directions as follow:

1. Open the PowerPoint document, run wireless interactive program, enter mouse mode, and interactive pen acts as the mouse. Play the PowerPoint presentation.

2. Click on the writing board to enter Write Mode, and you can make remarks.

3. Interactive pen acts as the mouse in mouse mode. Use the interactive pen to click on the writing board or on the writing board to turnover PowerPoint pages.

4. In Write Mode, click on the writing board or on the floating toolbar to turn to the continuous new page and create a new annotation page. For example, if you are presenting on page 5, and then you go back to page 4 to explain something, you can go to the page 6 directly by pressing this new page button. Time interval of turnover is determined by shift time of PowerPoint play pages. Time settings refer to Parameter Settings.

5. Click on the writing board or on the floating toolbar to turn to the previous and next pages and create an annotation page separately in Write Mode.
   (Remarks: there may have a delay when you turn to a new page, you can not write until the toolbar menu come out.)

6. If the Write Mode cannot display the page correctly (please refer to 7.3.11.2b to set proper PPT page switch delay) when playing a complex PowerPoint slide show, users may need to switch to mouse mode by pressing any up, down, left or right arrow keys or Enter key first. Then go to the page and click Write Mode again to continue your annotation.
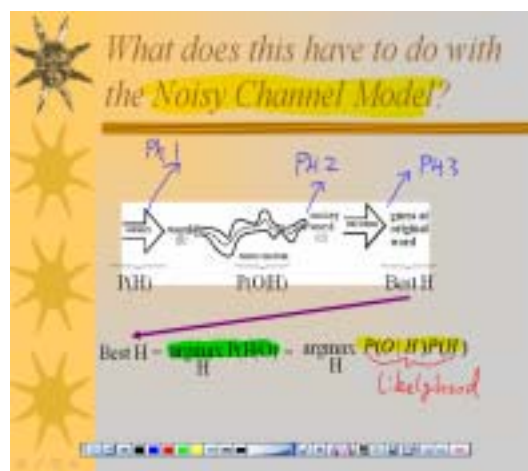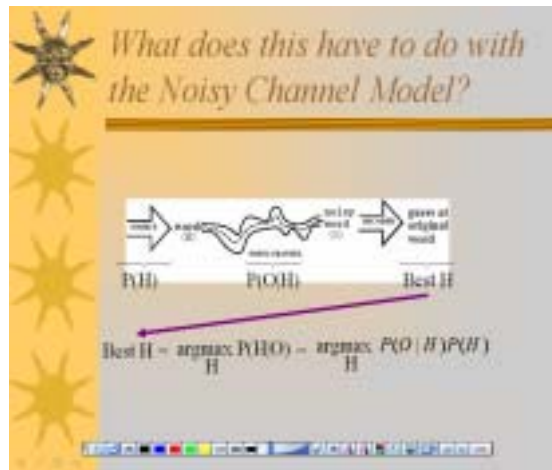
7.3.8. Operation of Print to Match of Printed PowerPoint Manuscript

Print to Match is a facility to make annotations directly on the manuscript printed while the annotations display accurately on the position of screen. This makes this procedure much easier as the user is not to move mouse and watch the position on the screen.

Directions as follows:

1. When printing PowerPoint (PPT) manuscript, a frame must be added: mark "**Frame slides**" in the PowerPoint print window.

2. Enter Whiteboard program, in Mouse or Write Modes, make the calibration process in **PowerPoint slide show mode**. After completion you can directly annotate on the PPT manuscript printed.

3. To enter calibration operation, hold the button on the pen over 2 seconds in Mouse or Write Mode, and the screen will be dim slightly and locked, then enter calibration mode, and mouse cursor is like this ⊹ .
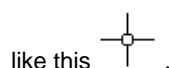
4. Calibration operation:

    4.1   locate standard of anchor point 1:

           Select an easily found position on the left side of the paper, such as a dot, or beginning of letter. After anchor point 1 founded, **move the mouse cursor by mouse** to the

selected position of anchor point 1 on the screen, then click the same correspondent position with the tip of interactive ePen at the **PowerPoint print-out**. At this moment, the mouse cursor on screen will automatically moved to the second anchor point.
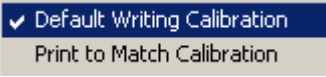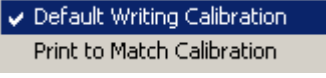
4.2　　　　locate standard of anchor point 2:

Without changing the anchor point 2 position of mouse cursor on screen, click at **right-top edge of the frame on PowerPoint print-out.** At this moment, the mouse cursor on screen will automatically moved to the third anchor points.

4.3　　　　locate standard of anchor point 3:

Without changing the anchor point 3 position of mouse cursor on screen, click at **right-bottom edge of the frame of PowerPoint print-out** to complete calibration. After successful calibration, the screen will unlock automatically, and the cursor restore to its previous shape.
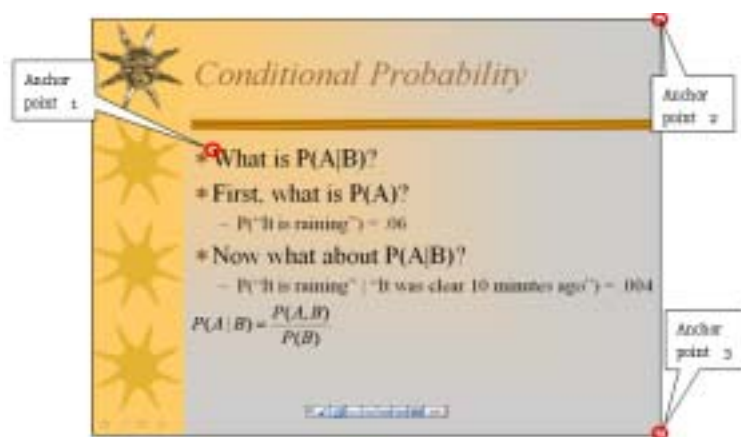
5.　　When entering Write Mode, writing area of hard copy and screen writing area of PPT screen correspond to each other, Print to Match function can be used normally.

6.　　When entering to Whiteboard Mode, the software will automatically switch to default writing area (default writing calibration). If return to Write Mode, automatically accord to Print to Match writing area (Print to Match calibration) again. If it is required to return to default writing area, select

✔ Default Writing Calibration
Print to Match Calibration　　in the tray menu, restore default writing area. At this moment, if you want to return to Print to Match, you should do the calibration again.

7.　　In the process of calibration, press ESC key to cancel calibration operation.

8.　　Print to Match. If the hard copy is sloping, the calibration process can calibrate it automatically.

9.　　The marked item on the tray menu 　✔ Default Writing Calibration　Print to Match Calibration　　indicates current status of writing area.

7.3.9.   Intelligent Session Recorder and Playback

Intelligent Session Recorder is to record and memorize all what have been presented and done on screen display into AVI format. It's usefully to repeat the last presentation or when preparing lesson teaching.

1.   To turn on or turn off Intelligent Session Recorder

2.   Click on Software Tool Bar and the following Sub-tool Bar will be displayed:

Exit

Record

Pause/Resume

Stop

PIayback
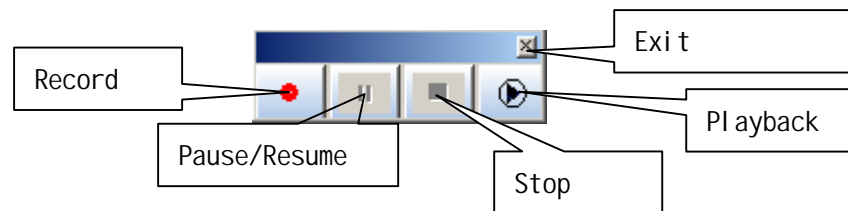
3.   Record Button   When "Record Button" is being clicked   the recording begins. And this button will turn grey and in the same time "Pause" and "Stop" will become visible for

clicking

4.   Pause/Resume Button   During recording   Click on will pause the recording and this button will be changed to   Click will resume the recording

5.   Stop Button   Click on will stop the recording and Playback Button will become visible

6.   Playback Button   First, return to mouse mode   Click Windows will automatically activate Windows defaulted Media Player (Windows Media Player   to proceed playback   Adjust Media Player to full screen mode for clear display

7.   How to save the recorded file   During Playback, Open Media Player, Select "Save As" to save to the preferred directory

Recommended Hints

✧   Before using Intelligent Session Recorder   it's better that below setting in Windows may be done   Go to Display Property in Control Panel>Settings>Advance>Troubleshoot to disable "Hardware Acceleration"

✧   If encountering unsmoothness in your hand-writing during session recording   please decrease screen resolution to 800×600.

7.3.10. Operation of Page Brower

1. **Write Mode Page Browse:** Click on the floating toolbar in the screen under Write Mode to enter page browse as follow:
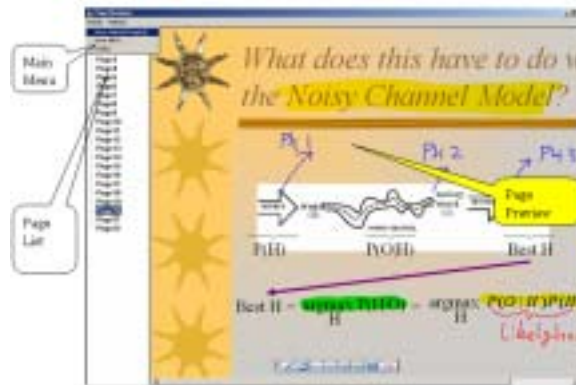
2. **Save, Import and Export of annotated pages**

    There are four available save methods in main menu:

    a) Save the page selected: to select the annotated page to save in the format of PNG\JPG\BMP;

    b) Save all pages: to save all annotated pages in the format of PNG\JPG\BMP;

    c) Export all pages: to export annotated pages for future use;

    d) Import all pages: to import annotated pages last saved to as the current pages directly.

3. **Delete annotated pages**

    First select the preview image to delete, press the button on the pen (or right click with mouse), and the menu pops up, click Delete.

7.3.11. Operation of Whiteboard Page Manager

1. There is a Import WB Files, Export WB Files and Save as Picture in the menu bar

    <File>

    ◆   Import WB Files: import WB files of previously prepared lessons class.

    ◆   Export WB Files: to export WB files of prepared lessons, same as save function.

    ◆   Save as Picture: to save document as pictures in the formats of Bmp, jpg, png. These images can then be shared by pupils via USB flash disks, printed or sent by email.

2. Delete and Save as Pictures:

    a)   Delete: first select the preview picture to delete, click the button on the pen, and a popup

menu   appears, click Delete, the selected page is deleted successfully.

    b)   Save Picture as: first select the page to save as, click the button on the pen, and a

popup menu   appears, click Save Pic, the page will be saved.

7.3.12. System Toolbar (Tray) Menu

1.   After Whiteboard software startup a tray icon   will appear in the system toolbar (tray)

menu, when clicking with the left or right mouse key the following menu pops up:
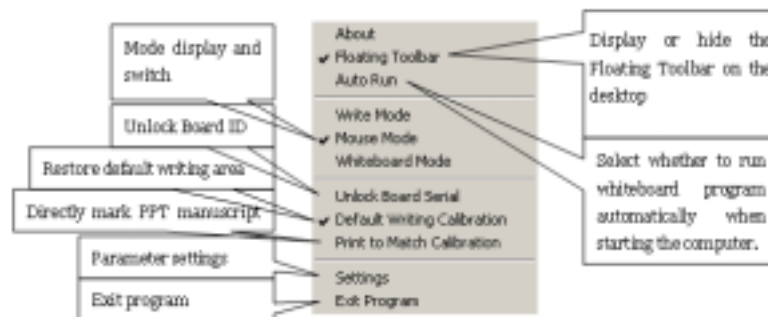
2.   Parameter settings dialog

    a)   Set default pen color (black).

    b)   When playing PowerPoint slide, set proper PPT page switch delay. (In consideration of

special effect of PowerPoint demonstration, 0,1,2,3,4,5, and 6 seconds are available, increase delay time if you find the display page is incomplete when playing a new page; but longer delay time may have a result that it will have a delay when you turnover page.)

c) Whiteboard background color (black and white background color are available).

8. Notices

8.1. Tips for Usage

Replace the Pen Refill

a) Clamp the head of ball pen refill with original iron clamp, pull out the used one.

b) Install the new pen refill into the pen holder.

c) Lightly press the pen refill up.

Replace the Pen Battery

a) Anticlockwise rotate the battery cover out.

b) Tip out the first battery.

c) Remove the second battery by inserting the back end of iron clamp into the square hole of the battery stack.

d) Remove the third battery cells according to above method.

e) Make positive poles of three new battery cells upward, and insert them into the battery sack one by one.

f) Tighten the battery cover clockwise.

1. If the pen is idle for 5 minutes it will enter energy-saving (sleep) mode. To revoke it, press the pen tip on any surface.

2. If the writing board is idle for 5 minutes it will enter energy-saving (sleep) mode. Press the Reset (Wakeup) key on the writing board to resume.

3. Handwriting should not be too fast. Or the handwriting strokes may split.

4. Do not use the pen and mouse at the same time.

5. Do not use the two interactive ePens at the same time.

6. Do not hold the button on the pen when writing.

7. Keep the board away from interference sources, such as strong light, strong magnetism and strong ultrasonic radiator.

8. When reinstalling or updating the application, you must make sure you have closed the

application.

9. When the system tray prompts that the writing board connection fails, or the icon displays like

    this , press Reset (Wakeup) key to activate the writing board. Check whether writing board

    low-power LED lights up. If it lights up, replace batteries.

10. There must be no barriers between the pen and receiver. Keep the paper flat, angle between the pen and paper greater than 60 degrees when writing.

11. During handwriting try to maintain the position of paper on the writing board. Or the input strokes may be skewed.

8.3.   Common Input Problems and Solutions

1. Q. When writing with interactive ePen, the pen is continuing to write when the pen is away from the board.
    A. Check whether the pen refill is installed correctly or install the pen refill again.

2. Q. Handwriting input cannot be realized or handwriting is discontinuous.
    A.
    i.   Check whether the battery power of interactive ePen is low, installation of battery polarity is wrong (positive pole should be outward), check low power LED of writing board lights up. If it is lights up, you should replace the battery of writing board. When writing, the paper cannot be tilted.
    ii.   Check whether USB receiver LED lights, press Reset key and check whether the receiver LED flickers.
    iii. Check whether there is barrier between the pen and writing board.
    iv.   Check whether USB driver is installed properly in Windows system. (Device Manager should display 'Philips PDIUSBD12 SMART Evaluation Board')
    v.   Check whether computer is in standby, sleep, or hard disk closed state.
    vi.   Check whether there is interference, such as strong light, strong magnetism or strong ultrasonic sources (keep a proper distance from the PC host, monitor or sound box).

3. Q. When writing with ePen, Whiteboard is out of battery and can't return back to Windows or Mouse mode.
    A. Refill batteries and reset whiteboard to continue or press Control+Shift+F7 of your keyboard to return to Mouse mode.

4. Q. When Control Right has been given to one of the Whiteboard user other than Master, how Master may force this user to return back the Control Right?
    A. Press Control+Shift+F8 on the keyboard of Master.

FCC Caution:

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.

FCC Notes:

The manufacturer is not responsible for and radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.