IQBoard UI

User Manual



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Important Statements

This manual is for IQBoard UI.

Use this product strictly according to detailed operation instruction in this manual so as to ensure proper use. Before you install this product, please read this manual carefully to save your time.

Opening the package means you have agreed to purchase this product, Returnstar will not accept returns of opened packages.

The product specification may be subject to change without prior notice. The sample pictures in this User Manual may differ from the real product.

Returnstar reserves all rights to charge the fee at anytime for product replacement, revision and update. The content in this manual will be regularly revised without prior notice, and the printed manual will be updated when new version is released. Returnstar will make no guarantee for this product, both explicit and implicit, including the salability and the adaptability to certain purpose, and will deny all guarantees alike.

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Environment Protection

When discarding this electronic device, please don't treat it as normal trash. To minimize the pollution and protect the environment, please recycle it.

Chapter 1 About IQBoard UI

IQBoard UI is a portable and low cost device which can transform any flat surface including normal whiteboard, display, and even wall into interactive working place. Simply attach IQBoard UI to any whiteboard or display, connect your PC and aim your projector, you instantly have an interactive platform. Pick up the signal pen which behaves like a mouse, you can now write in digital ink and control desktop applications directly from the board.

IQBoard UI has the following features:

An interactive system always by your side

Besides the magical power of transforming any flat surface into interactive platform, the entire system weighs less than 2kgs. So you can have an interactive whiteboard wherever you go.

Easy set-up

Simply attach IQBoard UI to any flat surface and enjoy your interactive experience. The whole set-up and calibration process can be done by anyone within several minutes.

Interactive mouse pen

While providing you the most natural writing feel, the ergonomic signal pen can also behave like mouse in performing left-click, right-click, double click and other mouse functions. You will find that controlling your interactive whiteboard has never been easier.

Save everything on board

Whether written in digital ink or by dry erase marker, IQBoard UI can save everything written on board to editable file, from every single stroke to the whole teaching process. Your extraordinary moment can become eternity.

Convenient hotkeys

Provide 14 keys on both sides of whiteboard surface to achieve certain frequently used functions. The functions of some keys can be customized.

Powerful IQBoard Software

Specially designed for interactive teaching and presenting, IQBoard software is a powerful yet easy-to-use tool that brings your lesson and conference to life.

With IQBoard Software, you can easily create a colorful courseware that capture students' eyes; you can decorate your lesson with dynamic multimedia elements and unlimited resources from our Resource Library; you can use various tools to show your ideas effortlessly; you also can save the whole teaching process and share with others...

Chapter 2 Specification

Model	D002	D003	
Digitizing	Illtresonia Infrared was signal non to write and apprets		
Technology	Ultrasonic + Infrared, use signal pen to write and operate		
Resolution	9600×9600, 600 dpi		
Precision	±0.05mm		
Active area	1.5m×2.0m (80" diagonal)		
Signal tracking rate:	5m/s		
Calibration	4 points, 9 points, 20 points		
Power supply	Power is obtained from the computer directly through the USB cable. The wireless type need to obtain power from wall outlet.		
Power	0.5 W		
consumption			
Pen battery	1 AAA battery		
Mounting	Mount in the top left corner of whiteboard and other display.	Wall mounting or stand mounting	
PC connection	2m USB cable or 10m USB cable (optional)	10m USB cable	
	Provide optional USB extender for connecting USB cable with another 15m network cable. Provide optional 2.4G radio frequency wireless module for wireless connection within 25M.		
Hotkeys	Optional. Can provide 14 hotkeys on both sides of whiteboard surface to achieve certain frequently used functions. The functions of some keys can be customized.		
Operating system	Windows XP/2003/Vista32, Linux, Mac 10.X		
System requirement	Pentium166 CPU (PentiumII or higher recommended) 64 MB RAM (128 MB recommended) 1G free hard disk space (for full installation) 1 free USB port 1 projector (short focus or ultra-short focus projector recommended)		
Operation and storage environment	Storage Temperature: - 40 to 60; Storage Humidity: 0% to 95%. Operation Temperature: 0 to 50, Operation Humidity: 0% to 65%		
Certification	CE, FCC, ROHS		
Warranty	3 years of limited warranty		

Chapter 3 Contents

IQBoard UI includes 2 versions: IQBoard UI D002 and IQBoard UI D003. Each version contains different components.

IQBoard UI D002

IQBoard UI D002 is a compact, portable, and easy to use device that turns your whiteboard, RP TV or wall into an interactive platform. The overall weight of IQBoard UI D001 is less than 1.5 kg

IQBoard UI D002 contains the following components:

- 1 receiver
- 1 controller
- 1 signal cable (3m)
- 1 USB data cable (2m)
- 1 signal pen (battery included)
- 1 corner mounting accessory kit
- 1 double-sided tape roll
- 1 installation CD (include IQBoard UI Drivers and IQBoard Software)
- 1 user manual
- 1 warranty card
- 1 product certificate card
- 1 carrying bag

IQBoard UI D003

IQBoard UI D003 is the perfect combination of IQBoard UI D002 and IQBoard P3 P080.

IQBoard P3 P080 is an 80 inch whiteboard adopting P3 ceramicsteel surface, which is ideal for both marker pen writing and projection. It features with anti-scratch, high luminance, high definition, easy cleaning (can be completely cleaned by any normal board eraser, and won't be damaged by mark pen or crayon) and fluent writing. It is also flameproof, doesn't required special maintenance, and can completely eliminate bright spots.

IQBoard UI D003 contains the following components:

- 1 IQBoard P3 P080 whiteboard
- 1 receiver
- 1 controller

- 1 signal cable (3m)
- 1 USB data cable (2m)
- 1 signal pen (battery included)
- 1 wall mounting accessory kit (for controller)
- 1 wall mounting accessory kit (for whiteboard)
- 1 installation CD (include IQBoard UI Drivers and IQBoard Software)
- 1 user manual
- 1 warranty card
- 1 product certificate card
- 1 mobile stand (optional)

Chapter 4 Setup Hardware

4.1 Setup signal pen



1. Unscrew the end cap of signal pen turning it counterclockwise.



2. Remove the battery cover by pushing the cover back away from the pen tip.



3. Insert 1 AAA battery with the plus (+) side up.



4. Put the battery cover back and screw the cap back on clockwise.



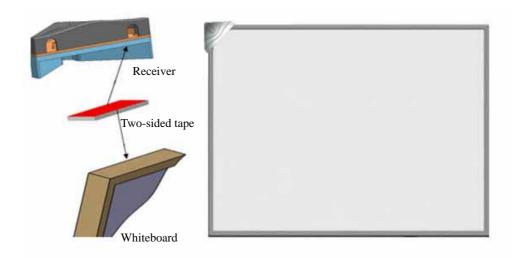
Note: If the pen tip has worn out, you can use tweezers to replace with a new one.

4.2 Setup receiver (IQBoard UI D003 can skip this step)

The receiver can receive the signal emitted by signal pen, and then identify its location on screen or board. Generally the receiver is fixed on whiteboard or RP TV by two-sided tape or screw.

In case the frame of the whiteboard or RP TV is level and smooth, take the following method:

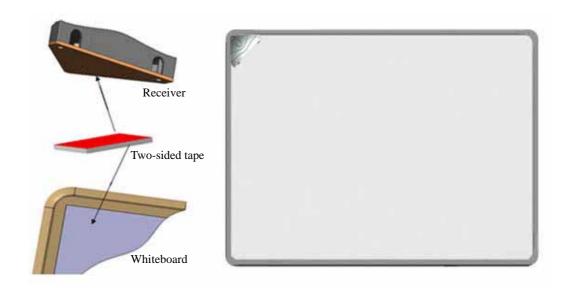
- 1. Wipe out the dust on the left top corner of the frame
- 2. Install the receiver on its base,
- 3. Scissor 5cm two-sided tape;
- 4 Affix the two-sided tape on the correspond position of the receiver base,
- 5. Take off the protective layer,
- 6. Align the two sides of the receiver base with those of the frame corner, push the base down until the base and the frame are firmly stuck. The installation is complete.



In case the frame of the whiteboard or RP TV has curvy corners, take the following method:

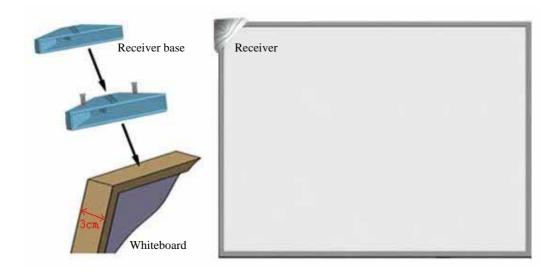
- 1. Wipe out the dust on the left top corner of the screen or board surface
- 2. Remove the receive base
- 3. Scissor 5cm two-sided tape;
- 4 Affix the two-sided tape on the correspond position of the receiver underside,
- 5. Take off the protective layer,

6. Stick the receiver on the screen or board. The installation is complete.



Note: Try your best to make sure the two sides of the receiver is parallel to those of the frame corner. If the receiver inclines too much, there will be deviation in your operation and writing.

In case the whiteboard thickness is within 3cm, you can directly cover the receiver base onto the frame corner, tighten the base with 2 enclosed bolts, and install the receiver onto the base in right direction. As follows:



Note: The receiver is not suitable to be used in soft curtain or rough wall, for such surface can affect signal transmission.

4.3 Mount IQBoard UI D003

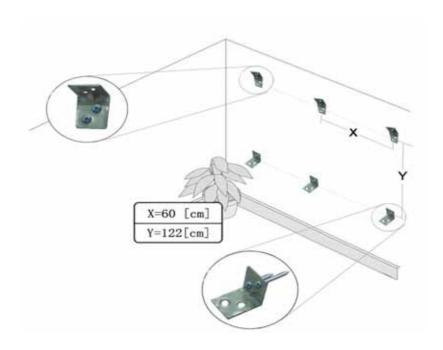
If you use IQBoard UI D003, you should mount it on wall.

Part List

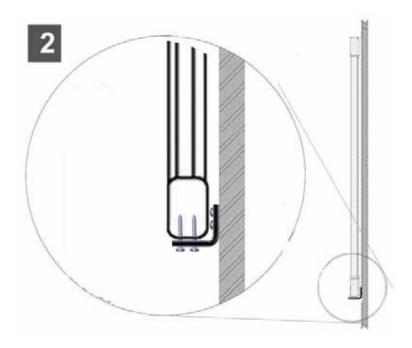
No.	Name	Quantity	Picture
1	Wall mounting bracket	6	
2	Self-tapping screw	24	(

Installation steps

- 1. Determine the position of the whiteboard lower edge, then screw 3 wall mounting brackets in the wall at this height (the distance between each 2 adjacent brackets is about 60 cm), as the picture below.
- 2. Screw in the other 3 wall mounting brackets 122 cm above, as the picture below.



3. Put the whiteboard on the 3 lower brackets, align the whiteboard with each bracket, then use self-tapping screws to secure the whiteboard on brackets, as the picture below.



4.4 Connect receiver with controller

The receiver and the controller are connected through 6-pins S-terminal cable. Connect the S-terminal cable of receiver to the PS/2 port of the controller. In case you want to hang the controller on the wall, you need to drill two holes on the wall, screw in the anchor bolts and wall hanging screws (included in the wall hanging suite), then hang the controller on the wall hanging screws.



Note:

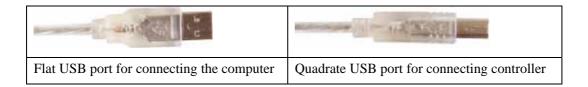
- 1. Please do not place the cable on the ground to avoid stumble. If you have to do so, please straighten and stick them on the ground with colored adhesive tape and wire.
- 2. When retracting the IQBoard UI, please disconnect controller and computer, then disconnect receiver and controller.

4.5 Connect controller with computer

You can connect the controller of IQBoard UI with computer through USB cable or Bluetooth adapter.

Connecting with USB cable

- 1. Connect the flat port of the USB cable with the USB port on computer,
- 2. Connect the quadrate side of the USB cable with the USB port on controller. Now the indicator on controller should turn red.



Connecting with Bluetooth adapter

- 1. Connect the flat port of the USB cable with the USB port on the transformer,
- 2. Insert the power plug of the transformer into a power socket. Now the indicator on controller should turn red.

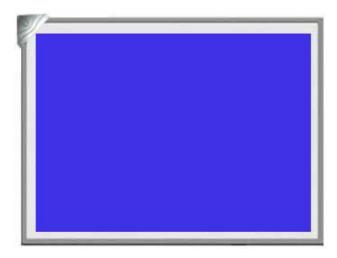


3. Plug the Bluetooth adapter into an available USB port of computer.



4.6 Adjust projected image

In case you use projector, connect the projector to your PC, and adjust the projection image to make it within the projection area and centered. Then use the trapezoid rectification function of the projector to make the projection image quadrate.



This blue area is the projection area. Its range should be within 40-80 inch. For whiteboards with soft hotkeys, the projection area should not exceed the hotkeys.

Note: Please do not look at the projector directly to avoid its strong light damaging your eyesight.

Chapter 5 Install and Uninstall Drivers

5.1 Install drivers

Run "IQBoard UI Drivers" in the installation CD to install the drivers according to the prompt. The computer will automatically find a new hardware and install the drivers. After the installation, the indicator on the controller should be green, and will turn green after 5 seconds.

Note: 1.If it is the first time you connect the Whiteboard Genius, and the driver and orientation program are not installed, the system will prompt "Found New Hardware". You can ignore or cancel this prompt, and install the driver and orientation program according to the above steps.

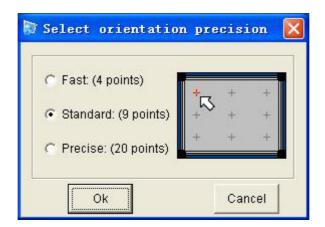
5.2 Uninstall drivers: Select "Start > Programs > IQBoard UI Drivers > Uninstall" to uninstall drivers. You also can open Control Panel, select "Add/Remove Programs", and in the list of currently installed Programs, select "IQBoard UI Drivers", then press the "Remove" button to remove the driver and orientation program.

Chapter 6 Orientation

At the first time you use IQBoard UI, you need to orient it, so the moving track of the signal pen can match the cursor. You can select 4, 9 or 20 points orientation. Normally 9 points orientation is adopted. After IQBoard UI is oriented, you don't need to re-orient at the same environment.

Operation steps are as follows:

1. Select "Start > Programs > IQBoard UI Drivers > Orient" to enter the Orient Precision Selection window, as follows.



2. Select Orientation Points and click "Ok", the orientation interface will appear. According to the arrows instruction, use electronic pen or writing pen (finger) to press the green center of the flickering red "+" on the surface. If the cursor is on the same point, this point is successfully oriented. And the next point appears. The whole orientation process is simply using your signal pen to click each orientation point in sequence.



3. The Orientation Interface will close automatically after finish the orientation. Then you can use signal pen to operate IQBoard UI normally.



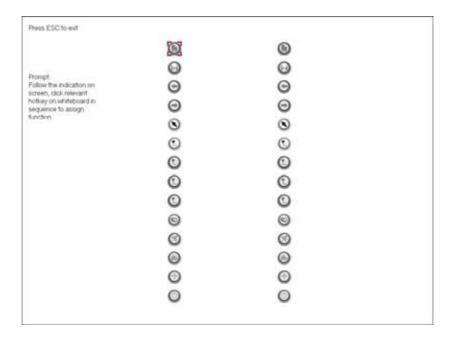
Prompt:

- 1. If you did not locate the accurate central point or clicked the wrong point, or the next fixed point appeared without press, please press "ESC" on the keyboard to exit this orientation and re-orient. Otherwise you can't operate the whiteboard accurately.
- 2. In case the relative position of the whiteboard and projector is changed, or the drivers or the monitor resolution is altered, please re-orient.
- 3. In the Orient Precision Selection window, right-click on the title bar, select "About (A)", you can view the current version of IQBoard UI.

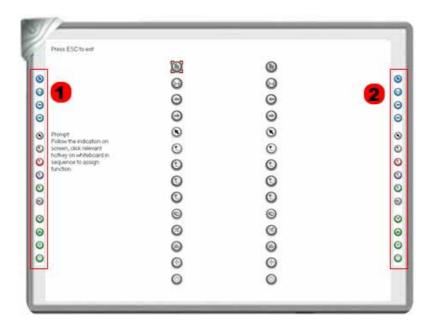
Chapter 7 Setup Hotkeys

At the first time you use the whiteboard with soft hotkeys, you need to set these hotkeys.

1. Select "Start > Programs > IQBoard UI Drivers >Hotkey setting" to enter the setting window.



2. Follow the indication on screen, click relevant hotkey in sequence. After the setting is completed, you can use these hotkeys.





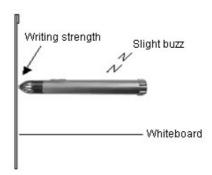
1. When setting the soft hotkeys, if some error occurs, you can press "ESC" key on the keyboard to exit the setting process, and then reset the hotkeys.

Chapter 8 Operation

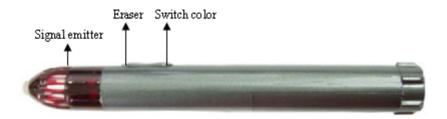
8.1 Use signal pen

When using the signal pen, please beware that:

- 1. Write at proper strength to guarantee that the signal pen can emit writing signal (slight buzz can be heard when you close your ear to the signal pen).
- 2. Try your best to make sure the signal pen and whiteboard is 90° perpendicular ($\pm 15^{\circ}$)
- 3. When writing with signal pen, you fingers should not cover the signal emitter, in order not to block the signal.



You can use the signal pen to do the following operations:



Single-click: Do not raise the signal pen too much (about 1-2mm from the tip to the surface), keep the signal pen perpendicular to the surface ($\pm 15^{\circ}$), then press the surface at proper strength.

Double-click: Press the surface twice with the signal pen. Make sure you click at the same point.

Right-click: Press the surface with the signal pen and hold for 2 seconds to popup the right-key menu. (IQBoard Software also provides this function. Refer to IQBoard

Software User Manual for details).

Drag: Use the signal pen to press an item and drag it to the appointed position (during which the pen tip should not leave the surface)

Write: When you are using IQBoard Software, you can use the drawing tools to directly write on the surface. (The writing strength should be the same as using the normal whiteboard pen.)

Eraser: When you are using IQBoard Software, press the "Left-click" key on signal pen, you can use eraser to erase the writing content on board.

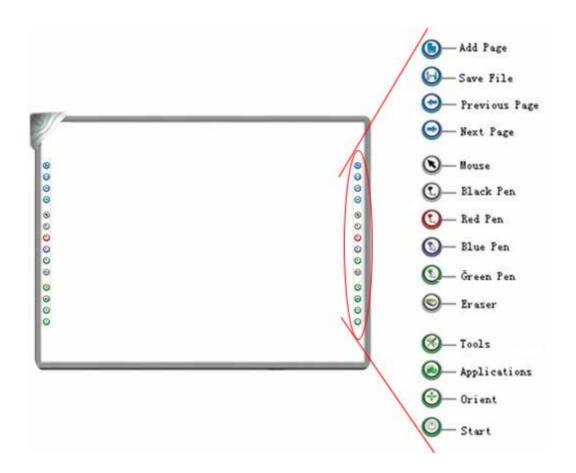
Switch Color: When you are using IQBoard Software, press the "Switch Color" key on signal pen, you can switch the color of digital ink.



Note:

- 1. Please use the 1024*768 resolution. Close all energy saving modes to avoid performance delay caused by dormancy.
- 2. To lengthen life span of the battery, please take it out if you will not use the electronic pen for a long time.
- 3. When operating with signal pen, the indicator on controller is green. After you move the signal pen away, the indicator will turn red.

8.2 Use Hotkeys



IQBoard UI provides hotkeys on both sides of whiteboard surface. The functions of each hotkey are as follows:

Add Page : In Windows Mode, press this key to clear all annotations on screen. In Board Mode, Press this key to add a new page in current "cdf" file.

Save File: In Windows Mode, press this key to save all annotations on screen to a page in current file. In Board Mode, press this key to save the current "cdf" file.

Previous Page: Press this key to go to the previous page.

Next Page: Press this key to go to the next page.

Mouse Press this key, you can use electronic pen or writing pen (finger) to achieve click, double-click, and drag function. When using IQBoard Software, press this key to switch between "Windows" and "Board" mode.

Pen: There are four "*Pen*" keys in different colors on the hotkey bar. Press one of these keys, you can write on board in corresponding color. Press "*Pen*" twice to modify its properties.

Eraser Press this key, you can erase the writing content on board. In "Windows" mode, press this key twice to popup the "Shut Down Windows" window.

Tools: Press this key to popup a quick access bar including shortcut icons for frequently used tools in IQBoard Software. You can add up to 8 shortcut icons in this bar. Press this key again to close the quick access bar.

Applications: Press this key to popup a quick access bar including shortcut icons for frequently used applications. You can add up to 8 shortcut icons in this bar. Press this key again to close the quick access bar.

Start : Press this key to start the IQBoard Software.

Orient: Press this key to popup the orientation interface. Press this key again to close the orientation interface.



1. Except the "Start" and "Orient" keys, all hotkeys are functional only after IQBoard Software is started.

Chapter 9 FAQ

- 1. The indicator on the controller is not lighting or turns red.
- 1. The connection between receiver, controller and computer is not secured, please check and re-connect.
- 2. The USB port is damaged, please try another one. In case you are using desktop computer, please use its rear USB port.
- 4. IQBoard UI Drivers haven't been correctly installed. Please uninstall the drivers, restart computer, and re-install the drivers. After the installation is completed, please reconnect the USB cable with computer.
- 2. I can't use signal pen to operate or write on projection area.
- 1. IQBoard UI Drivers haven't been started, please restart your computer or run "BoardSer.exe" in the installation folder directly.
- 2. IQBoard UI Drivers haven't been correctly installed. Please uninstall the drivers, restart computer, and re-install the drivers. After the installation is completed, please reconnect the USB cable with computer.
- 3. There is an object in front of the receiver that blocks the signal. Please remove the object.
- 4. The batteries of signal pen are low (when pressing the pen tip of signal pen, if the buzz is weak, it means the batteries are low). Please replace the batteries.
- 5. IQBoard Software hasn't been started, please start IQBoard Software first.
- 3. Signal pen could only control part of the virtual whiteboard.
- 1. The orientation is not precise. Please re-orient.
- 2. The projection area is too large. Please keep it within 40-80 inch.
- 4. The stroke is abnormal, or it is hard to operate.
- 1. The orientation is not precise. Please re-orient.
- 2. The batteries of signal pen are low. Please replace the batteries.

5. When writing or operating by signal pen, the response is slow or inconsecutive.

- 1. The computer is not under normal running or the memory is occupied too much. Please close some opened applications or restart the computer.
- 2. There are interference source around the system, such as flashing red light, continuous mental collision sound, etc. Please avoid the interference source when operating.
- 3. The batteries of signal pen are low. Please replace the batteries.

6. The pen tip of signal pen worn out.

Common abrasion will not affect normal operation. When the pen tip is severely abraded, you can purchase it from local dealer.

Other questions, please consult our service center or local dealer.

Chapter 10 Maintenance

Receiver and controller

- 1. Please do not use sharp or pointed objects to touch the signal receiving area in front of the receiver.
- 2. Please do not use wet cloth to clean the receiver or controller to avoid short circuit and other problems.
- 3. Please do not use and install IQBoard UI in dusty, foggy, wet and inclement environment. Keep it away from sharp object, heat source, corrosive chemicals, fire, and water.
- 4. Please firmly secure the receiver and controller to avoid falling and damaging the parts.

USB Cable

Do not put the USB cables on the floor where it may stumble others. If you have to do so, straighten them and use insulated adhesive tape or cable with contrast color to tie them up. Please handle carefully and avoid over-bending. Exposing the USB cable outside for a long time may shorten its life-span and cause other unnecessary damages, so please keep it carefully. If you use the whiteboard in the meeting room or class room, please fix the cable according to the cable alley.

Transport

Please handle with care, and do not put any weight on the receiver so as to avoid damaging the parts. In long distant transportation, it is suggested to repack the whiteboard with the original packing. If the original packing is unavailable, insert some protective padding between the components to protect them from intense vibration or crash. Avoid vibration, dampness, electricity, water and pressure in transportation.

Parts Replacement

Please do not disassemble the device or modify its inner structure so as to prevent accident or trouble. For maintenance or part replacement, please resort to our authorized technician. Make sure that you use our designated part or the one with same specification when replacing.