IQBoard IRQ

User Manual

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Statement

This manual is for all models of IQBoard IRQ .
Both Whiteboard and Interactive Whiteboard in this manual refer to all models of IQBoard IRQ. Colorless Writing Pen (Finger) is used for all models of IQBoard IRQ.

Use this product strictly according to detailed operation instruction in this manual so as to ensure proper use. Please read this manual carefully before you install this product.

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 information in this manual is subject to regular change without prior notice. Returnstar will make no warranties with respect to this product and disclaims any warranties, whether express or implied, of merchantability and fitness for a particular purpose.

Trademark Notice

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Recycling

Always return your used electronic products, batteries, and packaging materials to separate collection. This way you help prevent uncontrolled waste disposal and promote the recycling of materials.

Temperature and Humidity Requirements

Storage
Temperature: -40°C ~ 60 °C   Humidity: 0% ~ 95%
Operation
Temperature: -20°C ~ 50 °C   Humidity: 15% ~ 85%

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CONTENT

Chapter 1 Product Introduction

IQBoard IRQ is the latest interactive presentation boards. Connect the whiteboard with your computer and projector, then simply touch the projection area with your pen or your finger, you can transform the pen or your finger to Mouse and directly operate the computer on the projection area. With IQ Interactive Education Platform 6.0 software, Multi users can operate simultaneously on the board.

With IQBoard IRQ and IQ Interactive Education Platform 6.0 software, marvelous interactive communicating effects can be achieved in live demonstration, teaching, product exhibition, business conference, video communication, news broadcast, securities evaluation, military command, entertainment, medical consultation, engineering design, competition tactics analysis, weather analysis, etc.

IQBoard IRQ is provided with powerful IQ Interactive Education Platform 6.0 software, which makes your operation on interactive whiteboard more convenient. Through IQ Interactive Education Platform 6.0 software, various interactive teaching and demonstrating functions can be achieved, such as write, erase, label (in character, line, dimension and angle), drag, zoom, reveal screen, spotlight, screen capture and save, screen record and playback, handwriting recognition, on-screen keyboard, text input, text to speech, hyperlink to video, sound and webpage, and remote conference by NetMeeting. IQ Interactive Education Platform 6.0 software also has colorful object animation effects, page switching effects and interactive questions. Therefore, with IQ Interactive Education Platform 6.0 software, users can make more interactive courseware by designing unique object animation, adding sound or hyper linking.

IQ Interactive Education Platform 6.0 software also includes 500M IQBoard Resource Library covering more than 30 subjects, such as math, physics, chemistry, biology, gymnasium, etc. User can customize the installation by selecting subjects. The software also provide common line, shape, character, symbol, decoration graph, background template, Flash courseware, and other resources. Moreover, the software supports importing various picture files and DOC(X), PPT(X), XLS(X), PDF files. The page and file created by IQ Interactive Education Platform 6.0 software can be saved as and freely converted to various picture files as well as DOC(X), PPT(X), XLS(X), PDF, html files, etc.

We provide continuous upgrading service for IQ Interactive Education Platform 6.0 software. For more information and detailed operation about IQ Interactive Education Platform 6.0 software, please refer to IQ Interactive Education Platform 6.0 software User Manual in the installation CD.

Chapter 2 Specifications

2.1 Performance

Resolution: 32768×32768
Signal tracking rate: 8m/s;
Signal processing rate: 480 dots/s;
Orientation: 4, 9 ,12, 15, 20 or 25 points

2.2 Flexible Fixing and Relocating Methods

Fixing methods include wall hanging, cabinets, and mobile stand. Provide optional height adjustable mobile stand for 50-120 inch whiteboards, the height can be adjusted from 1.88M to 2.12M.

2.3 Durable Surface, Solid Body

The surface adopts dedicated writing film made of DuPont anti-abrasive coating. It features with anti-scratch, high luminance, high definition, easy cleaning (can be cleaned by whiteboard detergent or wet cloth), and can completely eliminate bright spots. The backboard, which is resistant to distortion, expansion and shrinkage, adopts PS board with high density. Model supporting normal pen writing is also provided.

2.4 PC Connection

Standard: 10m USB cable for connecting IQBoard with PC, external power is not required.
Optional: USB signal amplifier to extend the USB cable to 20m.

2.5 System Requirements

Windows XP/2003/Vista/7/8/8.1
Intel C2.1 or higher
256 MB RAM or higher
1G free hard disk space (for full installation)
1 free USB port
1 projector (short throw or ultra-short throw projector recommended)
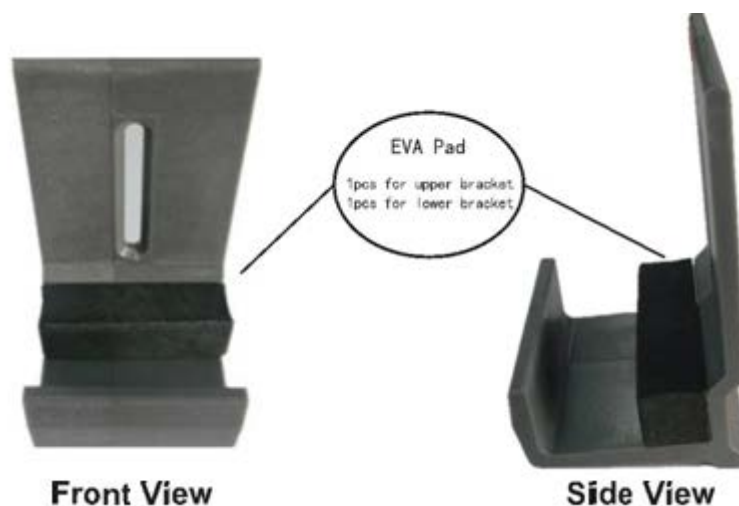
Chapter 3 How to Install IQBoard

3.1 Wall Mounting（L-type Bracket）

Parts list

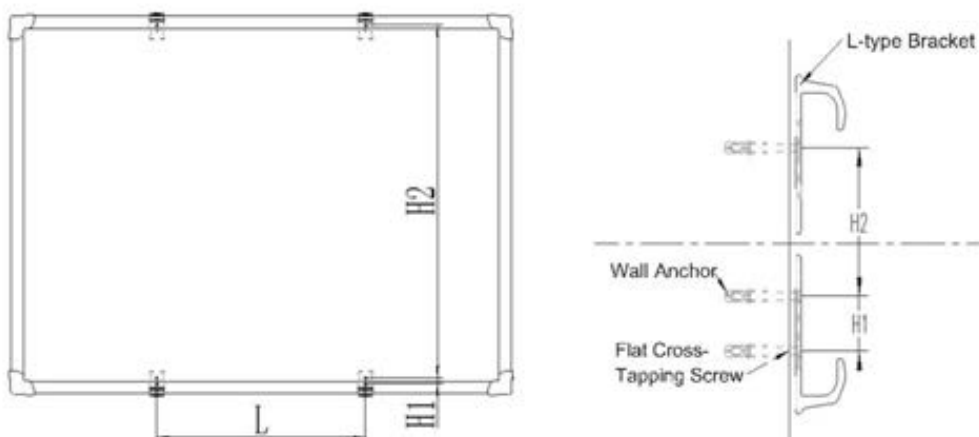| No.	Picture	Item	Qty
1		Flat Cross-tapping Screw	8
2		Wall Anchor	8
3		IQBoard L-type Bracket	4
4		EVA Pad	4

Installation steps

Step 1. Stick the EVA Pads into front of L-type Brackets. One EVA Pad for each of the upper bracket, one for each of the lower one, as shown below:

EVA Pad
1pcs for upper bracket
1pcs for lower bracket

Front View　　　　**Side View**

Step 2. Determine the installation height of the bottom L-type Brackets according to the location of IQBoard on the wall. Then determine the installation height of the upper L-type Brackets according to the size of your IQBoard. Make sure when you pull up the upper brackets, IQBoard can be taken out; and when you pull them down, IQBoard frame can be clasped. Two upper/bottom brackets should be on the same height level. You will need 2 screws for each of bottom Brackets, and 1 screw for each

of the upper ones. To determine the position of brackets, take an 84" IQBoard for e.g. as below:

IQBoard	L(mm)	H1(mm)	H2(mm)
84"	700	20	1217

Note:

L: Horizontal distance between 2 upper/bottom brackets.

H1: Distance between the 2 screws on the same bottom bracket.

H2: Distance between the screw on the upper bracket and the upper screw on the bottom bracket.

Note: Please measure L, H1 and H2 according to your own IQBoard size.

Step 3. Drill 6 holes(40mm in depth) by a 6mm electric drill on the positions of the 6 screws you determined as per above. (2 holes for each of bottom bracket; 1 hole for each of upper bracket)

Step 4. Put a Wall Anchor into each hole, and screw the brackets with M4*50 flat cross-tapping screw.

Step 5. Put IQBoard on the fixed 4 L-type Brackets, and let it centered horizontally. Fasten the upside screws and lock the downside screws.

Chapter 4 Connect to Computer & Projector

After fixing the whiteboard, find a connecting port at the bottom of right corner protector. Plug the USB Standard-B into the connecting port, and plug the USB Standard-A into the available USB port of computer, as follows. External power source is not required. And please connect the projector into the VGA port of your PC video card.

USB Standard-A Plug for connecting the computer	USB Standard-B Plug for connecting whiteboard

Start the projector after connection, and adjust it to make its projection within the active area and centered. Then use the trapezoid rectification function of the projector to make the projection quadrate.

Maximum projection area for whiteboards without hotkey	Maximum projection area for whiteboards with hotkeys

The blue areas are the maximum projection areas. For whiteboards without hotkey, there should be 1cm margin between projection area and whiteboard inner frame. For whiteboards with hotkeys, the projection area should not exceed the hotkeys.

 Note:

1. In case you use 16:9 whiteboard, please choose the projector supporting the 16:9 projection mode.
2. The projection image must be within the active area of the whiteboard, otherwise the whiteboard cannot work normally.

Chapter 5 How to Install and Uninstall Driver

5.1 How to Install Driver

Run the *IQBoard IRQ Drivers V4.0* in the installation CD and install it according to the prompt. The computer will automatically find a new hardware and install the driver.

Note:

When you connect IQBoard IR to the computer after driver installation, hardware initialization will be progressing. Please don't touch the board area until initialization is finished in 10 seconds.

5.2 How to Uninstall Driver

Select *"Start > Programs > IQBoard IRQ Drivers V4.0 > Uninstall"* to uninstall. You also can open Control Panel, select *"Add/Remove Programs"*, and in the list of currently installed Programs, select *IQBoard IRQ Drivers V4.0*", then press the *"Change/Remove"* button to remove the drivers.

Chapter 6 How to Set up IQBoard

6.1 Set up the driver

6.1.1   Driver under the program

After the driver is successfully installed, find out the driver under the program and there are five options, including Help, Orient, Hotkey Setting, Setting and Uninstall.

6.1.2   Quick icon on the task bar

The drive icon will show up on the task bar. Right or left click on the icon to choose or close the menu.

6.2 Orientation

At the first time you use IQBoard IRQ, you need to orient it, so the moving track of the pen (finger) can match the cursor. You can select 4, 9, 12, 15, 20 or 25 points orientation. Normally 4 points orientation is adopted. After the whiteboard is oriented, you don't need to re-orient under the same environment.

To orient the whiteboard

Please do as following steps when you orient the whiteboard:

Step 1. Select *"Start > Programs > IQBoard IRQ Drivers V4.0 > Orient" or* press ⊕ on the hotkey bar if your whiteboard is with hotkeys. Or select the orient option by right clicking on the driver icon at the task bar. The default way is quick 4 points calibration, as shown in the image below

Press ESC to exit

Step 2. Follow the arrow-shaped indicator and press the red cross center point one by one with pen or finger, if the cross turns green, it means calibration is successful.

Step 3. If the writing is imprecised after the calibration is done successfully, regarding the win8/win10 OS, please choose and set the aspect ratio as 16:9 to solve the problem.
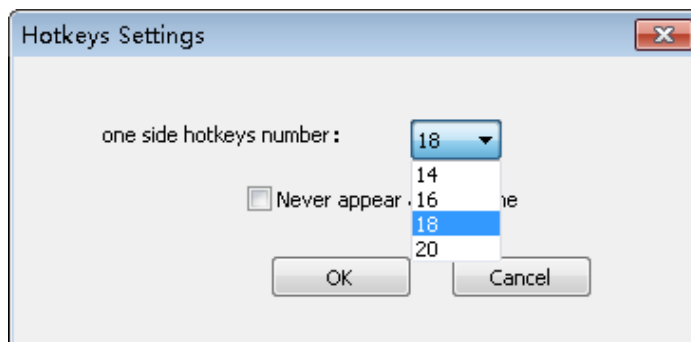

Note:

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. Please make your pen (finger) upright when orienting.

3. In case the relative position of the whiteboard and projector is changed, or the driver or the monitor resolution is altered, please re-orient.

6.3 Hotkey Settingrientation

If you select interactive whiteboard with hotkeys, at the first time you use the whiteboard, you need to set these hotkeys. And there is no need to reset the hotkeys if the computer connected the whiteboard isn't changed.

Step 1. Select *"Start > Programs > IQBoard IRQ   Drivers V4.0 > Hotkey Settings"* or select the hotkey setting option by clicking on the driver icon on the task bar to enter

Hotkey Settings window. Please select and check the number of hotkeys of both sides at first.
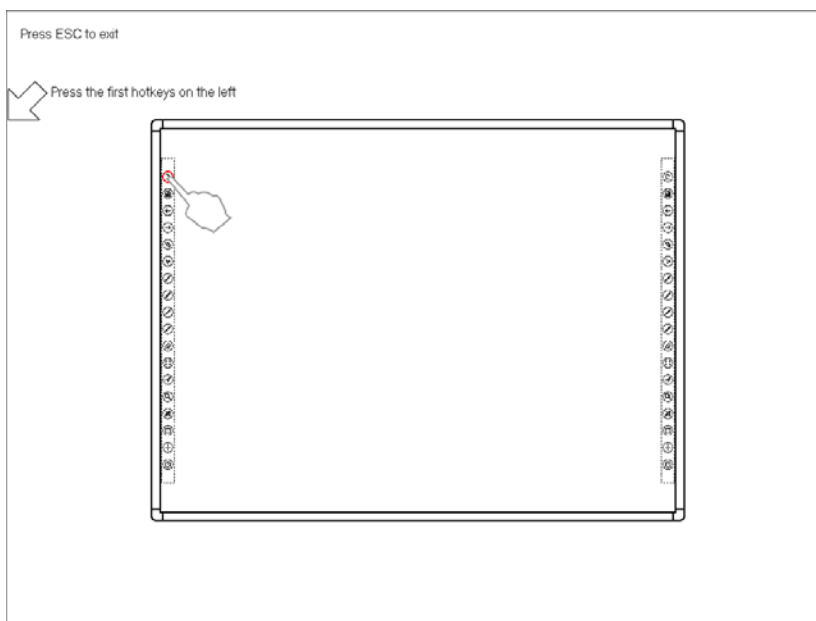

Step 2. Then press the hotkeys marked with red square to finish setting one by one with pen or finger. Only four hotkeys at four corners need setting. The window will exit after the setting.
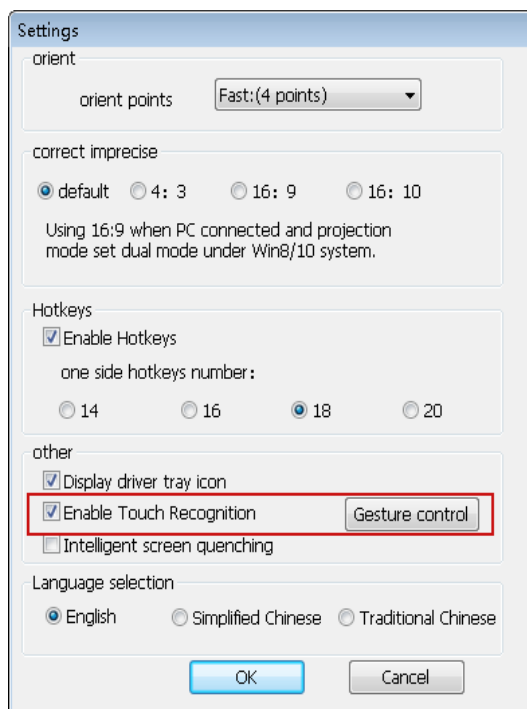

Note:

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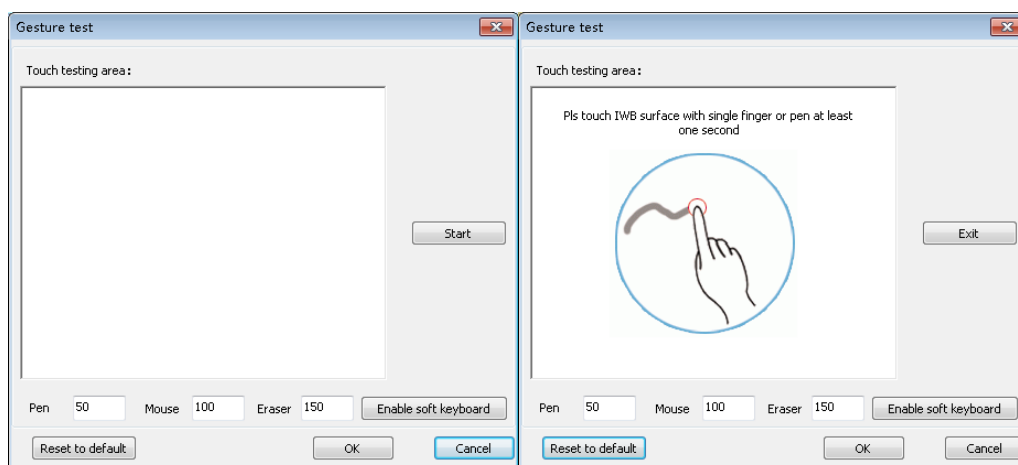

6.4 Hand Gesture Recognition

It is available to set up the value for pen, selection and eraser tool by ticking the hand gesture recognition and enter the setting window.
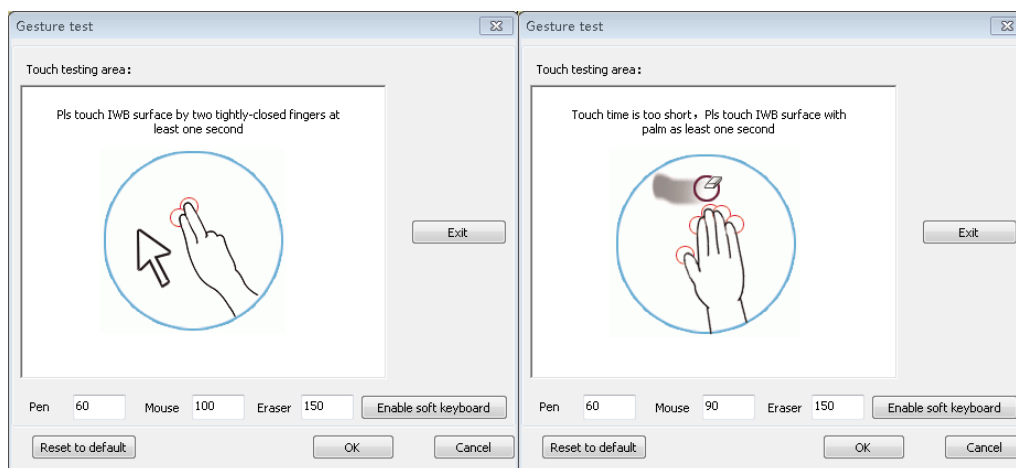
Step 1: Click 'Start' and conduct different operation on the surface to set up the value for pen, selection and erase tool one by one.

Step 2: For the pen tool, please press the surface more than 1 second with one finger. For the selection tool, please press the surface with two fingers closed more than 1 second. And for the eraser, please use palm or fist to press the board for more than one second.

Step 3: After the value is set, please try to use one finger, two fingers closed and the palm or fist to operate. And you could adjust the value if the effect is not good.

6.5 Settings

Before using the driver, pls right click on the quick icon and select 'Setting' to set the calibration points, aspect ratio, number of hotkeys, hand gusture recognition and languages.

6.5.1 Other setting
●   Correct precise
When the computer OS is Win8/10 and projector is set as copy mode, it's adviced to adjust the value as 16:9 if the writing is imprecise.

●   Show quick icon of driver always
The driver icon on the task bar will disappear if the user click it and choose 'exit'. Users could click on the 'Settings' from the start menu or the quick icon of driver, and select the 'Display driver tray icon' to show driver icon always.

6.5.2 Screen on/off
Press the whiteboard surface with five fingers over 3 seconds and please don't make the palm close to the surface, then the touch function will be disabled and users could write with markers. At the same time, the projector is in the sleep mode.
Please use same hand gesture to enable touch function and restore the computer screen.
Note: This function is only availble for the whiteboard that supports 5 touch or more.
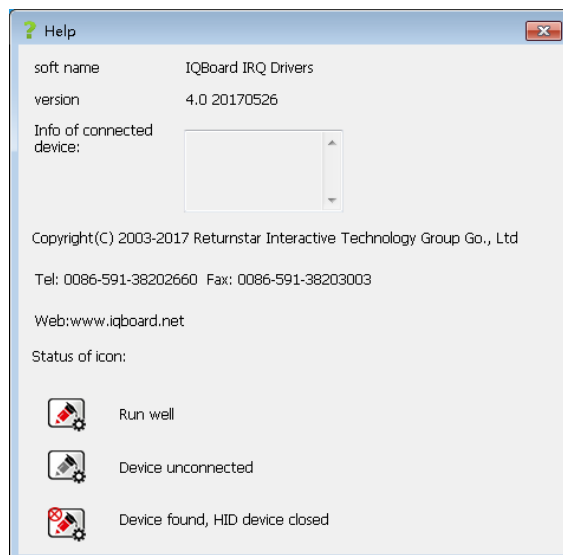
6.5.3 Touch on/off
Press the hotkey of 'Program' about 3 seconds and the notice of "touch off" will show up. When touch is off, users could press page up/down hotkeys to operate the PowerPoint document.
Please do the same way by pressing the hotley of 'Program' to enable touch function.
Note: This function will only be availble when hotkey setting is done successfully. And it could avoid maloperation caused by little flying creatures.

6.6 Help

The name and version of driver and the company information will show on the help window. Moreover, users could check whether the whiteboard is connected successfully.

Chapter 7 How to Use IQBoard

7.1 Basic Operations

For IQBoard IRQ, you can use the enclosed pen or your finger to write or perform Mouse function. Following are the tips for some basic operations:

Single-click
If you use pen or finger, press the surface with the pen or finger tip at proper strength.

Double-click
If you use pen or finger, press the surface twice with the pen or finger tip at proper strength. Please make sure you press at the same point.

Right-click
If you use pen or finger, press the surface with the pen or finger tip, and hold for 2 seconds to popup the right-click menu.

Left-click
It will switch to the default left click after the right-click operation is done.

Drag

If you use pen or finger, press an object with the pen or finger tip and hold, then move the pen or finger tip to drag the object to the desired position.

Write

If you use pen or finger, start IQ Interactive Education Platform 6.0 software, select a drawing tool, then you can write or draw by pressing the surface with the pen or finger tip.
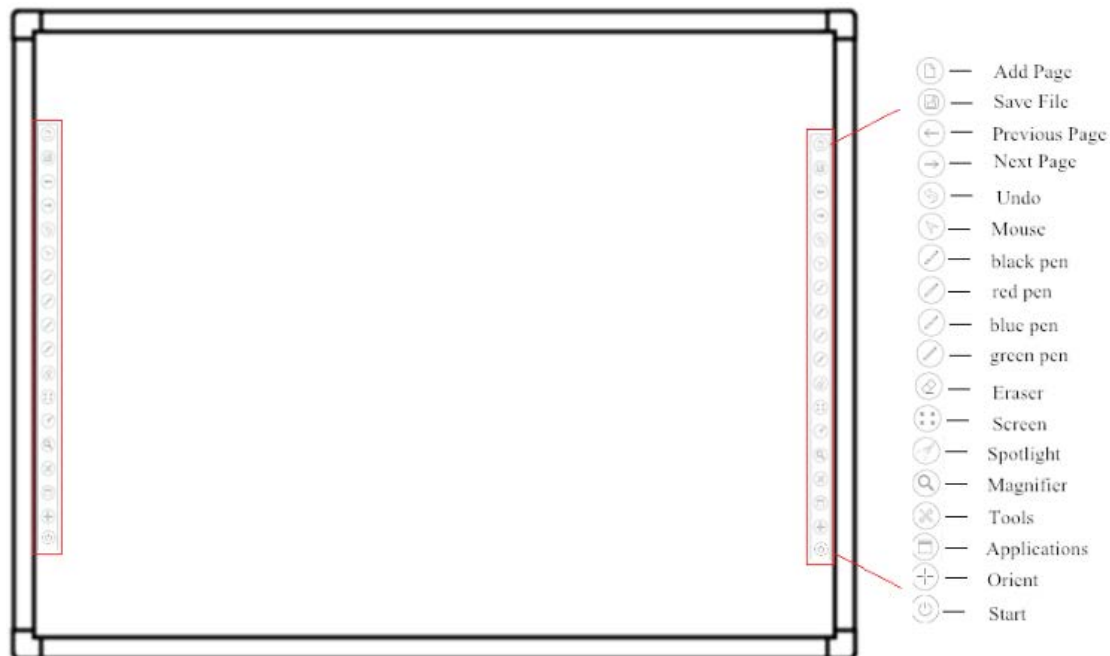
Orient

Press the central point of the cross vertically with finger or pen to finish the calibration.

Note:

1. *If the computer has the resolution of 1024 * 768, it's recommended to stop eco-friendly mode to avoid delay of response.*
2. *To erase content, please press interactive whiteboard with palm. To perform mouse function, we recommend you pressing whiteboard with two fingers closed.*
3. *Gesture recognition can not be used under dual-user model.*
4 *Only the Start, Orient, Previous and Next hotkeys work even the IQ Interactive Education Platform softw isn't started.*

7.2 How to Use Hotkeys on Whiteboard

Following is the introduction of above hotkeys.

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.

Undo : Undo the previous operation

Mouse : Press this key, you can use pen (finger) to achieve click, double-click, and drag function. When using IQ Interactive Education Platform 6.0 software, press this key to switch between Windows Mode 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 the board in corresponding color. Press "Pen" twice to modify its properties.

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

Full screen : Press the key to switch into full screen mode.

Spotlight : To activate the spotlight tool.

Magnifier : To activate the magnifier tool.

Tools : Press this key to popup a quick access bar including shortcut icons for frequently used tools in IQ Interactive Education Platform 6.0 software. You can add up to 8 shortcut icons in this 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.

Orient : Press this key to popup the 9 points orientation interface.

Start : Press this key to start the IQ Interactive Education Platform 6.0 software.

> **Note:**
> *1. Except the "Start" and "Orient" keys, all hotkeys are functional only after IQBoard Software is started.*
> *2. The functions of "Frequently Used Tools", "Frequently Used Applications", "Orient" can be opened or closed by press the relevant hotkeys on the hotkey bar.*
> *3. For IQBoard IR , when at Split-screen status in Dual-user Mode, the left hotkeys are for Teacher Pen, and the right for Student Pen. Teacher Pen can use the hotkeys including Mouse,*
> *4. Freehand Drawing Tools, Eraser, Frequently Used Tools, Frequently Used Applications and Orient. Student Pen can use the hotkeys including Mouse, 4 Freehand Drawing Tools, Eraser, Frequently Used Tools and Frequently Used Applications. If it's not Split-screen status in Dual-user Mode, no difference between left and right hotkeys.*

7.3 How to Use Gesture Recognition

7.3.2 Customize Gesture Recognition Sensitivity

Move slider to adjust
Move the sliders to change the value of each range for functions. The wider the value range, the easier you can perform the related function.

Gesture testing area
Once the gesture recognition is set already, you can still test it. Pressing with hand palm, the cursor will turn to the icon of each function, or the function's name will show on the testing area.

Reset to default
To reset Gesture Recognition sensitivity to default settings, click "Reset to Default".

7.3.3 Basic Operations

Single/Double click
Simply click the active area with the pen or finger tip quickly and make sure click at the same point.

Right click
When the left-click is on, press the whiteboard area for 2 seconds with your pen or finger to activate the right-click;

Activate IQ Interactive Education Platform 6.0 software
Tap with five fingers or your palm to activate IQ Interactive Education Platform 6.0 software.

When in Board, Playing, Windows and Reviewing Modes

Tap with one finger to achieve Freehand Drawing Tools.

Mouse function

Tap with two fingers to imitate functions of Mouse.

Eraser

Tap with your palm to enable function of Eraser.

Hand Gesture of Windows

If you use IQBoard IRQ in Windows 7/8, you can active multi-touch functions of Windows such as Zoom and Rotate.

7.4 Multi-user Writing

Before use Multi-user Mode, please make sure:
1. The operation system you are using is WIN7, WIN8 or win10.
2. Multi-users writing is available for your touch hardware.
3. The license or USB dog of the IQ Interactive Education Platform software supports the multi-user writing. And the software is registered successfully.
4. Regarding the IQBoard DVT, DVTQ, IRQ and IRQ, the function is supported.

To use Multi-users Mode:
1. Start the IQ Interactive Education Platform 6.0 software after the multi-user writing is enables.
2. Select a Pen from Drawing Tools toolbar, and then users can write simultaneously.
3. You can rotate or zoom one or several objects selected in the whiteboard page.
4. Tick the *"System Setting> Other Settings"*, the object will speed up automatically according to the moving speed when moving the object.

Multi-user Mode	 Tips: Multi-users should use the same pen tool to write in Multi-user Mode.
Gesture Recognition (Zoom and Rotate)	 Zoom　　　　　　　　　　　　Rotate
Inertial Movement	 Select and pull the object to move it forward automatically.

Chapter 8 FAQ

1. What kind of orientation precision should I select?

It depends on your requirement of orientation time and accuracy. You have the following choices:

Quick orientation (4 points): for fast orientation

Standard orientation (9 points): for most of situations

Precise orientation (20 points): for high-definition system

2. When operating and writing on the whiteboard, the position of pen or finger doesn't match the position of cursor.

1) The relevant location of projector and white has been changed. Please re-orient the whiteboard.

2) The projection area has trapezoid distortion, please adjust the projection area, and re-orient the whiteboard.

3) When orienting the whiteboard, the pen or finger is not perpendicular to the surface, please re-orient with correct posture.

4) When orienting the whiteboard, the pen or finger tip missed the green center of the red orienting cross, please re-orient the whiteboard.

5) The filters around whiteboard have been shaded by other objects, such as dust or chalk dust and so on. Please keep filters clean.

3. When I operate and write on the whiteboard, the system response is slow, or the stroke is intermittent.

The computer is not under normal running or the memory is occupied too much. Please close some applications or restart the computer.

The operating or writing force is uneven. Sometimes the force is too light to be sensed.

Initializing hardware failed. Please reconnect the cable with the board to initialize the hardware again.

4. When I operate and write on the IQBoard IRQ , the system doesn't respond.

Please reconnect the cable with the board to initialize the hardware again.

5.What if part of area in IQBoard IRQ can not work or write?

1) Hardware initialization failed. Please reconnect USB cable and try again when hardware initialization is finished.

2) Make sure that you do not touch the board when the hardware initialization is processing. If you touch the board, it will cause this problem. Please reconnect the USB cable or restart computer then try to operate or write on the board after hardware initialization is finished.

6. The pen tip worn out.

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

For other questions, please consult our service center or local dealer.

Chapter 9 Cautions and Maintenance

9.1 Whiteboard

For the interactive whiteboard that do not support normal marker (no "W" included in the product model), please try not to use normal marker to write on the surface. Before cleaning, please shut down the computer and switch the projector into standby mode to make the dirt more obvious. In case of normal dirt, spray some water or detergent on the surface, then use the paper to wipe the dirt out. If you leave some ink trail by mistakenly using the fountain pen, please buy some special whiteboard detergent and spray it on the soft cloth to clean the surface. For cleaning the mark left by the permanent marker, first paint some ink of dry erase marker on the mark (the ink of dry erase marker can dissolve the ink of permanent marker), then use soft cloth to clean. If the mark still exists, spay some whiteboard detergent, and clean it out.

> *Note: Please do not use other organic solvent for cleaning. Otherwise it may permanently damage the surface.*

For the interactive whiteboard that supports normal marker, you can use normal whiteboard eraser and wet cloth to clean.

> *Note: Clean the frequently used whiteboard once a week to keep the best definition.*

Please do not use sharp or pointed objects to scratch the surface and frame, otherwise the scratched part may be damaged, and won't work normally. During the usage, do not knock or press the surface fiercely with your pen, wand or finger to avoid the damage of whiteboard surface, pen and wand. You can use sand wax to eliminate the scratch on the surface, and use dry cloth to clean out.

Since the mobile stand (or the wall hanging parts) is designed only to support the weight of the whiteboard, please do not put the additional weight or pressure on the whiteboard. Please keep the whiteboard away from intense collision, shaking, pressing and do not install it by force, otherwise it may cause cracking, short circuit and surface distortion.

Please do not use and install interactive whiteboard in dusty, foggy, wet and inclement environment. Keep it away from sharp object, heat source, corrosive chemicals, fire, and water. Please do not put the whiteboard in the outlet of hot air, otherwise the material will deteriorate and its life-span will be shortened.

To avoid harm from improper operation, please do not use chair or other tool to help short students use the whiteboard. If students are not tall enough to use the whiteboard, please low down the whiteboard under the help of the professional technician.

9.2 USB Cable

Do not put the USB cables on the floor where people might stumble over them. If you have to do so, straighten them and use insulated adhesive tape or cable with contrast color to tie them up. Please don't bend the USB cable excessively. 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 classroom, please fix the cable along the cable alley.

9.3 Projection

Face the whiteboard when operating and writing on the projected image, stand aside when you turn back to face the students. Please do not look at the projector directly to avoid its strong light damaging your eyesight. Instruct students how to use the whiteboard, tell them not to face the projector directly.

9.4 Transport

Please handle with care, and do not put any weight on the surface so as to avoid the

surface distortion and damage. Lay the whiteboard upright during the transportation or storage. For 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. Please avoid vibration, dampness, electricity, water and pressure in transportation.

9.5 Part Replacement

Please do not disassemble the whiteboard 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 the same specification when replacing.