Interactive Whiteboard

Owner's Manual

V20100107

Qomo HiteVision, LLC

www.QOMO.com

Note: Attentions during installing and operating.

Caution: Damages to people during operating or damages to machine caused by improper operation.

- To prevent fire or electric shock, please don't expose the whiteboard in rain or wet environment.
- Interactive Whiteboard should avoid fire, electric shock and direct sunlight.
- Whiteboard's net weight is 23~30kg. Please fix the whiteboard on the wall with screws to make it safe.
- When use Interactive Whiteboard together with projector, please don't look steadily at the light sent by projector or look at it for a long time, especially for the children.

This manual is only for Interactive Whiteboard on "technical specification list".

- You can write and operate on the whiteboard only with matched whiteboard pen.
- This product use electromagnetic calibration technology. There should not be strong electromagnetic field nearby to prevent interference.
- If connecting Whiteboard and computer with USB cable, you'd better place the cable in hidden place to avoid pulling.
- If connect Whiteboard and computer with USB cable, please use the attached USB cable. If you would like to buy USB cable by yourself, please select the USB cable of resistance lower than 0.5Ω.
- If connect Whiteboard and computer in wireless way, the distance between wireless receiver and Interactive Whiteboard is no more than 15 meters. And there shouldn't be any barrier against electromagnetic waves.
- Don't touch or scratch the Whiteboard panel and frame with hard and sharp object. Don't drill holes or drive nails in anywhere of the Whiteboard.

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System Requirements

Lowest Environmental Requirements:

- CPU: 1.0GHz×86
- Memory: 256M
- Display Card: Support 256 or above
- Hard Disk: 1G
- Screen Display Resolution: 800×600, 1024×768, 1280×1024
- USB 1.1 port

Recommended:

- CPU: 2.0GHz×86
- Memory: 512M or above
- Display Card: Support 256 or above
- Hard Disk: 2G
- Screen Display Resolution: 1024×768 、1280×1024
- USB2.0 port

Software Running Environment: Microsoft Windows 2000/XP/2003/Vista/7

Instruction

Interactive whiteboard uses scanning induction technology. Working together with projector and computer, Interactive whiteboard can be used as a big writing panel. To any image projected on the whiteboard, you can write on and touch the whiteboard directly with writing pen. Interactive Whiteboard provides more advanced system functions and more effective presentation than before.

Main Features:

- **Writing:** Write, draw and perform mouse functions with your finger. The whiteboard displays your penmanship instantaneously.
- **Annotating:** The user can operate and annotate over any computer applications, or save notes directly into Software, including PPT, WORD, EXECL, AVI, MEPG, Flash, JPEG and etc.
- **Interacting:** In video conferencing, both parties can share data and write in real time just like a standard conference room. Once integrated with Polycom or other video conferencing systems, using Interactive whiteboard can improve video conference results and efficiency. The system can support 12 screen short-cut buttons.
- **Teaching:** Can replace traditional teaching equipment, whiteboard software provides different teaching range and level, improve teaching results and efficiency.
- **Energy conservation:** Controls energy cost within 2W. No need for additional.
- **Connection:** Provide two connection options: USB connection and wireless connection, use can select based on their need.

Software Features:

Flow!Works(E) software has below features:

- Designed for teaching and conference systems.
- The screen display is high light and low glare.
- Saves images in Vector image format. Vector images take up less storage space and makes file transferring easier and faster.
- Users can customize pen type, line width, and color schemes to fit their individual preferences.
- Powerful screen functioning supports real-time editing.
- Graphic tools allow users to choose a background, input graphics and images.
- Paintbrush pen is pressure sensitive.
- Writing file allows for easy conversion to many other formats such as: PDF, JPG, GIF, PNG, TIFF, BMP, etc.
- Simulate mouse operation.
- The Hot Keys can realize functions of Page up & Down, Create new page, Pen width selection, Save, Clear full screen, Restore, etc.
- Supports other application software.
- Support handwriting recognition of Chinese word, English word, Number, and special character's.

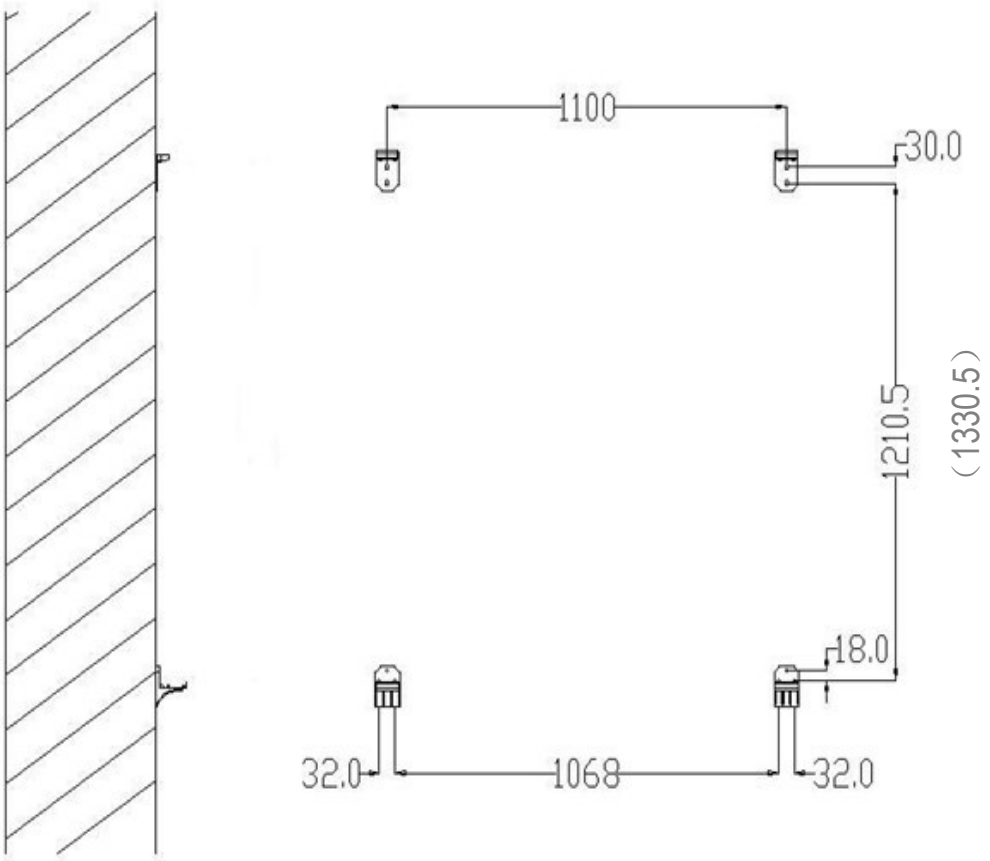
How to install hardware

Install whiteboard

Before install whiteboard application software, please refer below instruction to install whiteboard first. There are three installation ways based on different whiteboard model:

Install whiteboard on wall

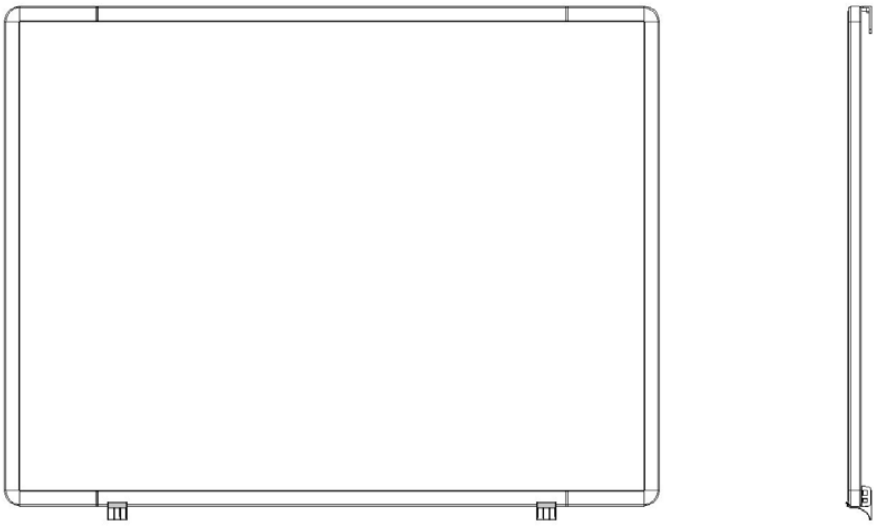
Step 1: Set desired height according to user's preferences, place the stilettos on the wall to make holes for wall mounting parts and hook, then fix wall mounting parts and hook by screws. Install hook at the lower and install wall mounting parts at the higher. Shown as below:



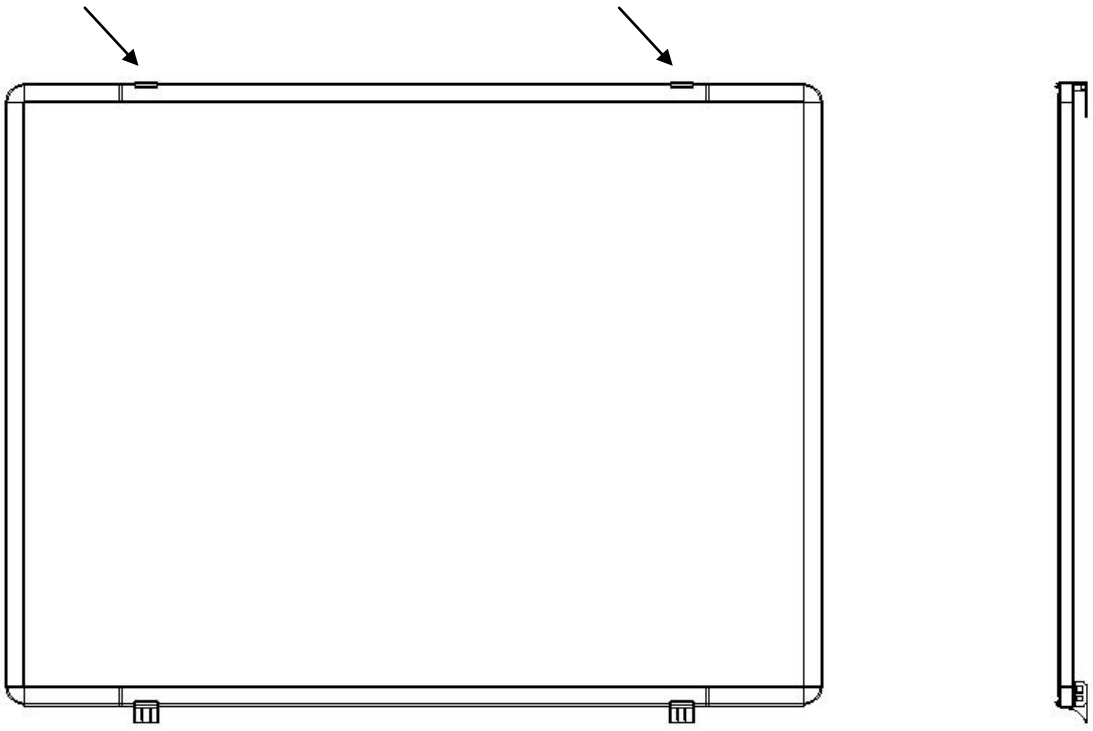
Notes: For model QWB200EM/QWB100WS, the distance between wall mounting parts is 1210.5mm. For model QWB300EM, the distance between wall mounting parts is

1330.5mm.

Step 2: Install whiteboard on the wall mounting parts and hook. Shown as below:



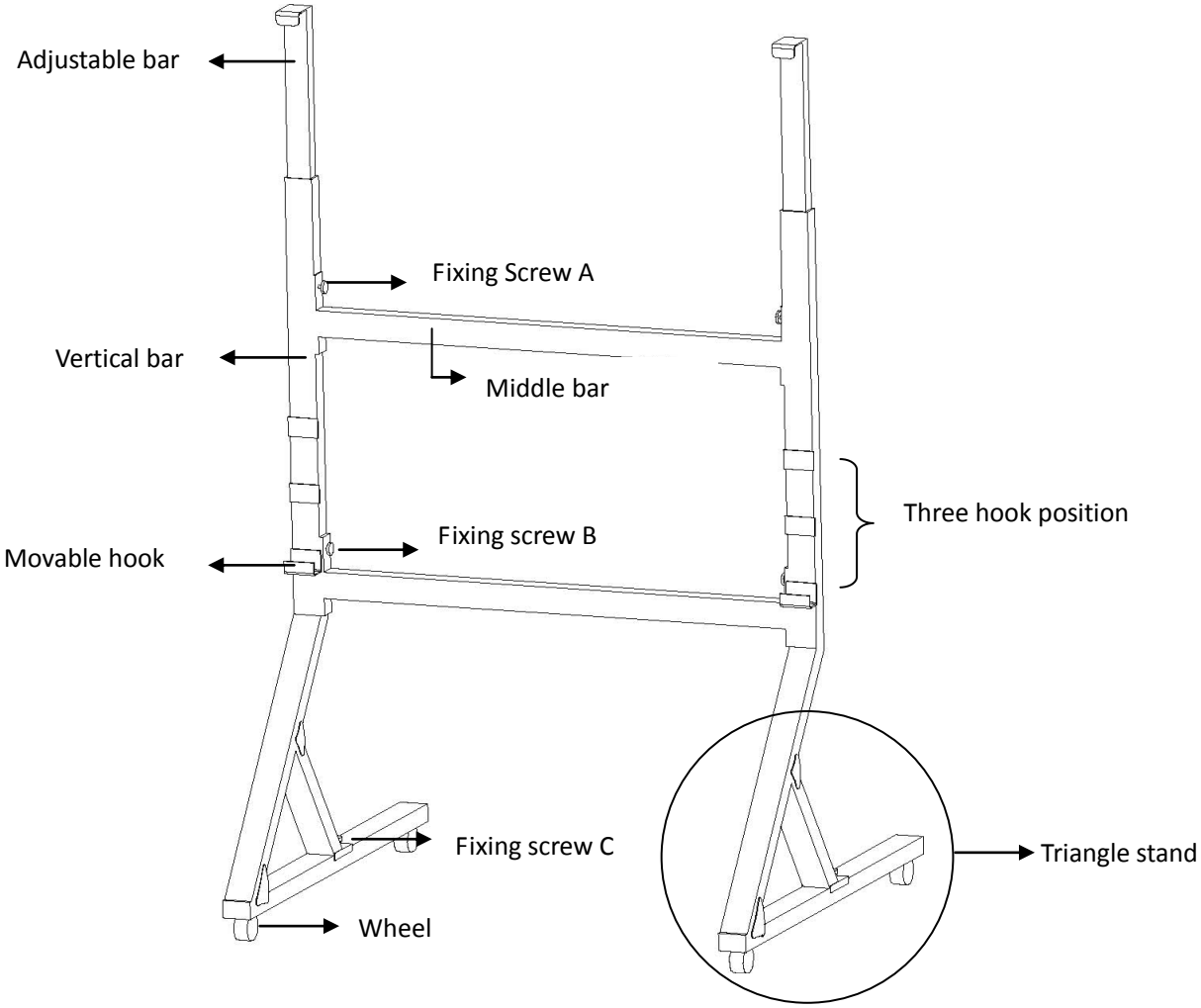
Step 3: Fix the upper hook on the wall to fix whiteboard, if there is position problem during installation, please use EVA cushion(45*20*1mm) to adjust, shown as below:



Install whiteboard on floor stands

There are two stands: A (SD10)type and B type. Please check your stand type before install.

A（SD10） Type：

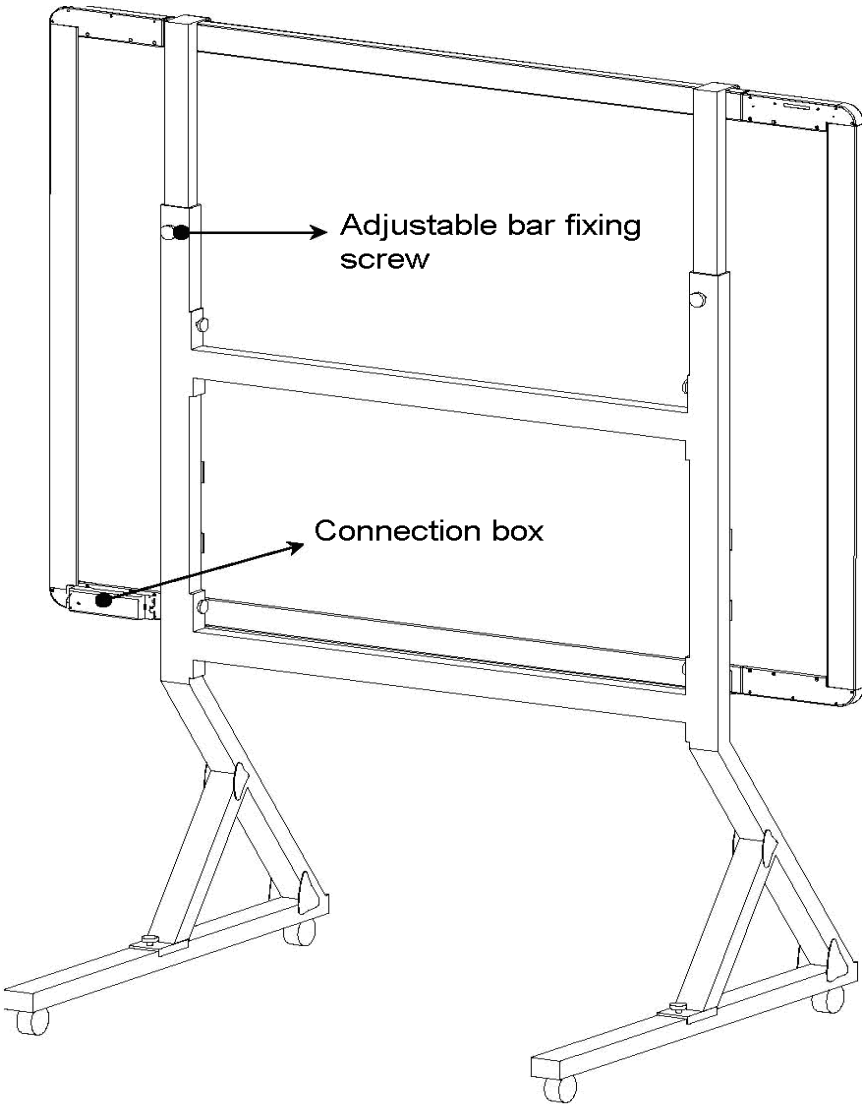


Step 1: Open two vertical bars into triangle stand, fix their fixing screws C at two sides.

Step 2: Fix two middle bars on two vertical bars with fixing screws A and Screw B.

Step 3: According to your need, adjust hook to desired height.

Step 4: Referring “Install whiteboard on Wall” to install main control box.

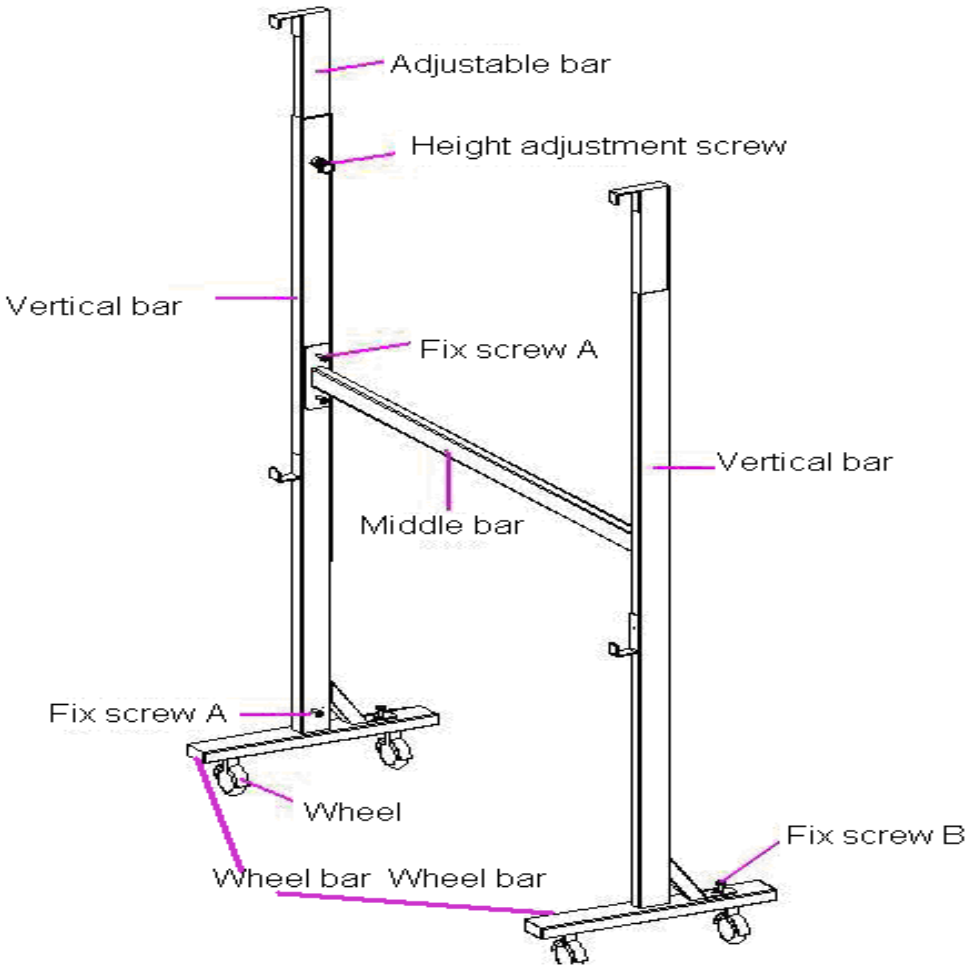


Step 5: Pull out adjustable bar, put whiteboard on hool and then put down adjustable bar, shown as above.

Step 6: Fastern the fixing screws on two vertical bars.

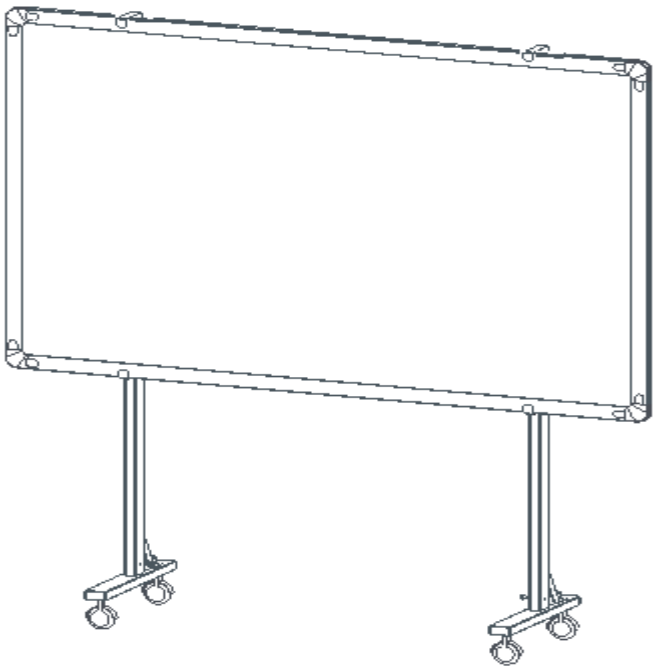
B Type：

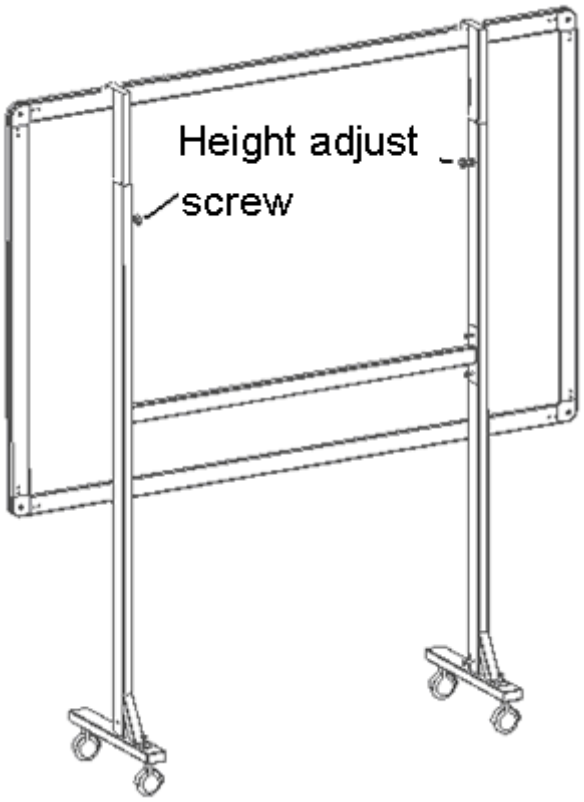
Step 1: Each stand includes four parts: Wheels, middle bard, and vertical bar (including adjustable bar). Here are setup steps: 1). Fix four wheels on stand.2). Fix two vertical bars on the wheel bars with screws (screw A and screw B positions on below picture). 3). Fix the middle bar on two vertical bars with screws.



Step 2: Referring “Install whiteboard on Wall” to install main control box.

Step 3: Put the whiteboard on stands, the adjustable bar is flexible, adjust height you desired and then fix with height adjustment screws. Shown as below:

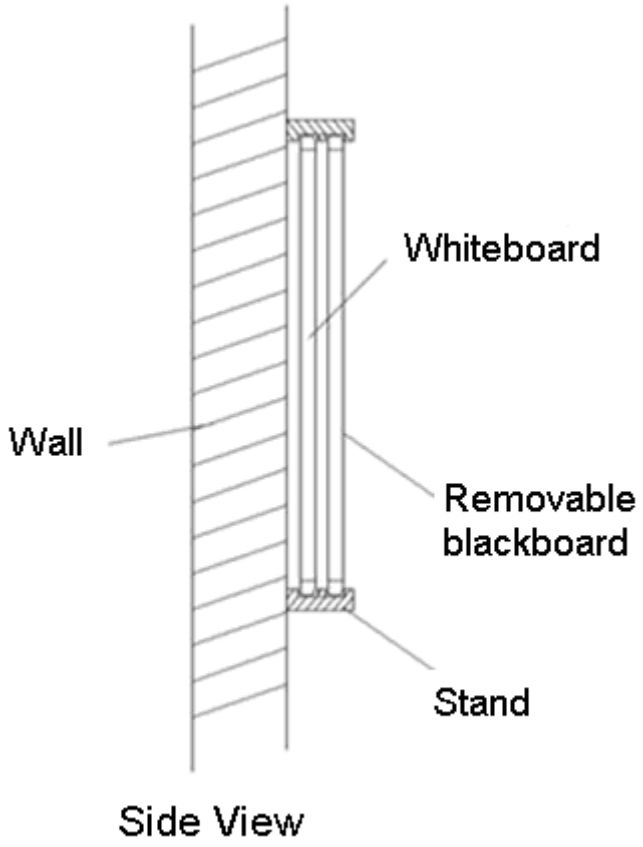



Height adjust
screw

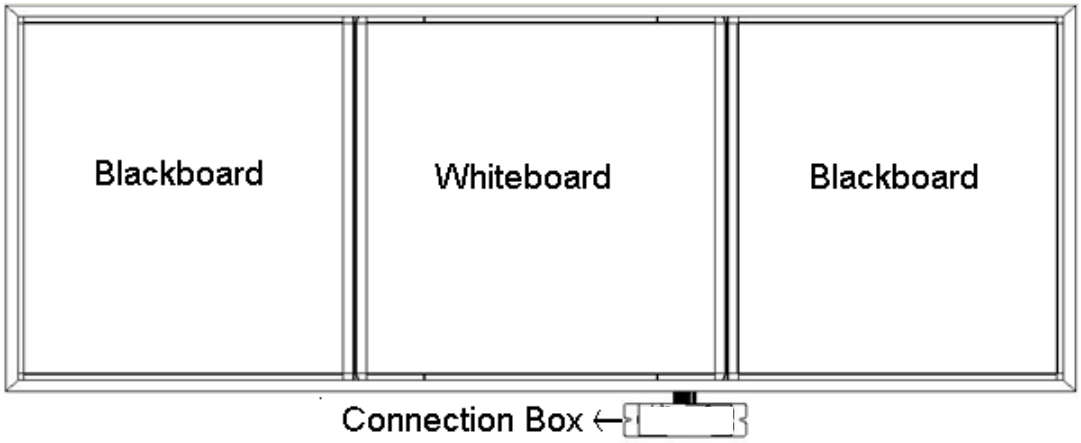
Install whiteboard behind blackboard

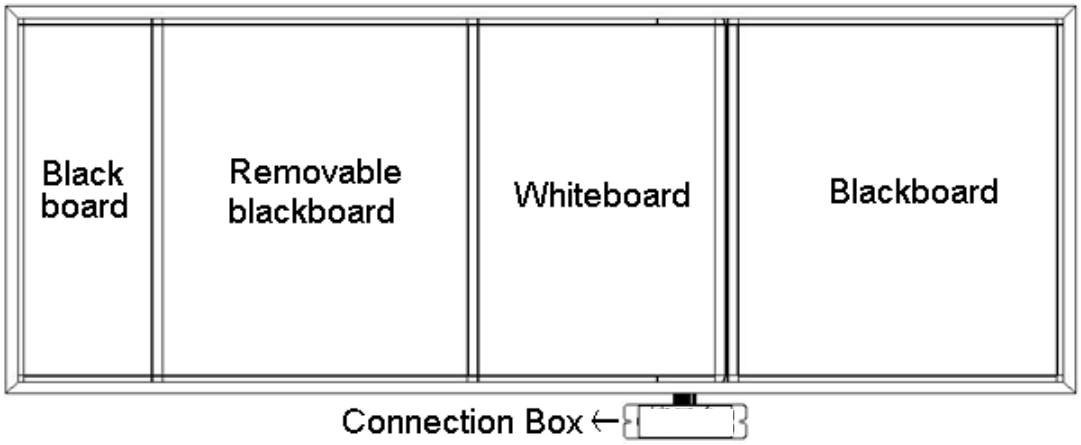
You can install whiteboard behind blackboard to work with blackboard. Here is installation step:

1. Take off a removable blackboard.
2. Make a rectangle hole under the removable blackboard taken off based on whiteboard connection box's position, make sure the whiteboard cable can put through.
3. Take off connection box on whiteboard, put whiteboard on the frame, then put whiteboard cable pass through rectangle hole.
4. Connect cable and connection box, fix connection box on the wall.
5. Install the removable blackboard that you taken off on the wall. Shown as below:

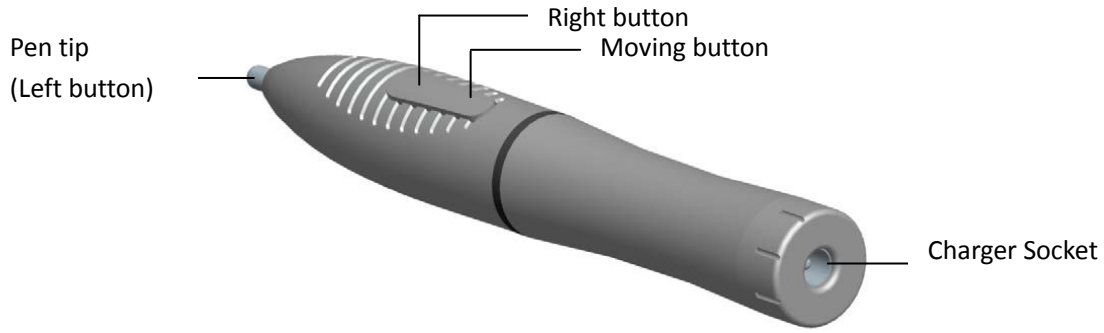


Side View


Blackboard
Whiteboard
Blackboard
Connection Box


Black board
Removable blackboard
Whiteboard
Blackboard
Connection Box

Install whiteboard pen



How to use

The Whiteboard pen can simulate three kinds of mouse modes as follows:
1. Mouse move: Put the pen tip close to the whiteboard and move.
2. Mouse left click: Press down the pen tip on the whiteboard and move.
3. Mouse right click: Put the pen tip close to the whiteboard and press down the button on the pen.

Replace pen tip

When the pen tip gets damaged and can not write properly, please change it with new pen tip provided with whiteboard. Take off the pen tip cover with clamp, and then replace with new pen tip.

Notes：

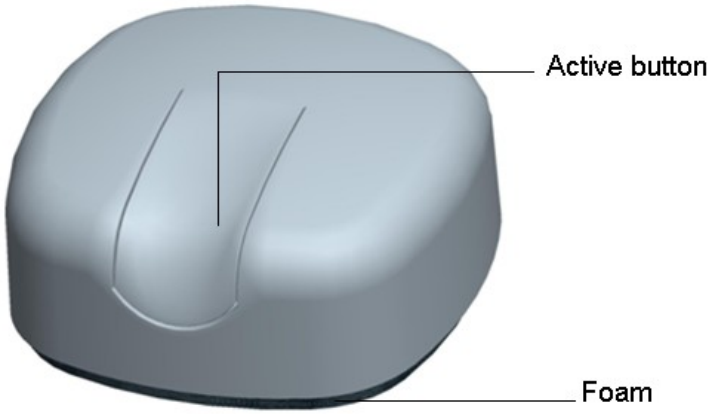
1. When you write on the Whiteboard, please put the pen tip straight on the Whiteboard writing surface, or it will cause bad writing effect.
2. Please change the battery termly to make sure the normal use of the Whiteboard pen.
3. Please charge the pen only by pen charger provided with whiteboard.
4. When the Whiteboard pen is not used for a long time, it will change to stand-by mode automatically. Under this mode, it will no respond when put the pen close to the Whiteboard. Press the right button or the pen tip to enable the pen to work.

Replace battery

If your electromagnetic pen is using AAA battery and can not be charged, please replace battery termly. Here is how to install battery:

Open the battery cover on pen, put in an AAA alkalescent battery according to the anode and cathode (the spring side is the cathode) to the battery hole, and then fasten the battery cover before use the pen.

Install eraser



Replace battery of eraser

Open the battery cover on eraser, put in an AAA alkalescent battery according to the anode and cathode (the spring side is the cathode) to the battery hole, and then fasten the battery cover before use the eraser.

How to use

Press active button once to make eraser inter work mode. The eraser can simulate as traditional eraser, place eraser on the electromagnetic whiteboard surface and wipe slightly to clear stroke on whiteboard.

Tips:

- The eraser will enter stand by model to save power when it is not used. So please press active button before use.
- The eraser is mainly used to clear electronic pen stroke, in order to prolong its use life, please do not use it to clear stroke of water pen and chalk.
- Please do not use pen and eraser at same time on whiteboard.

Whiteboard Connection

There are two connection ways of whiteboard: USB connection, and RF wireless connection, please select your connection way based on whiteboard model you purchased.

USB connection

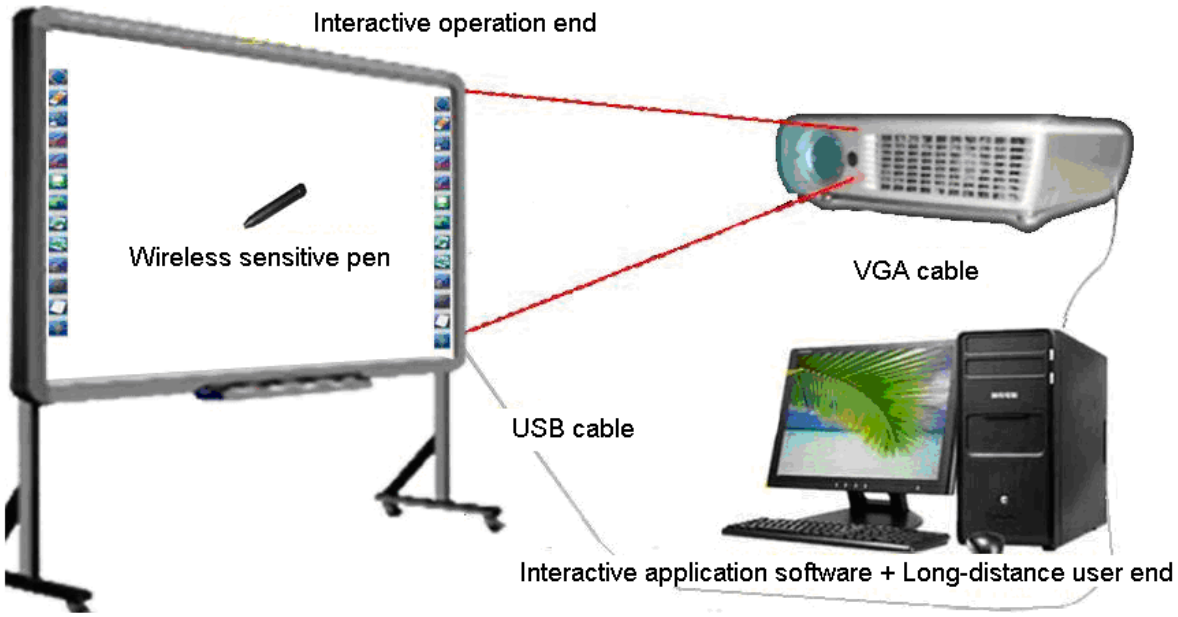
Step 1: Setup whiteboard.

Step 2: Adjust the position of projector and whiteboard.

Step 3: There is USB port on connection box at the lower right corner of whiteboard, plug one end of USB cable to this USB port.

Step 4: Plug another end of USB cable to host computer's USB port.

Step 5: Connect computer and projector (refer to projector's user's manual).



USB connection figure

RF wireless connection

Step 1: Setup whiteboard and adjust the position of projector and whiteboard.

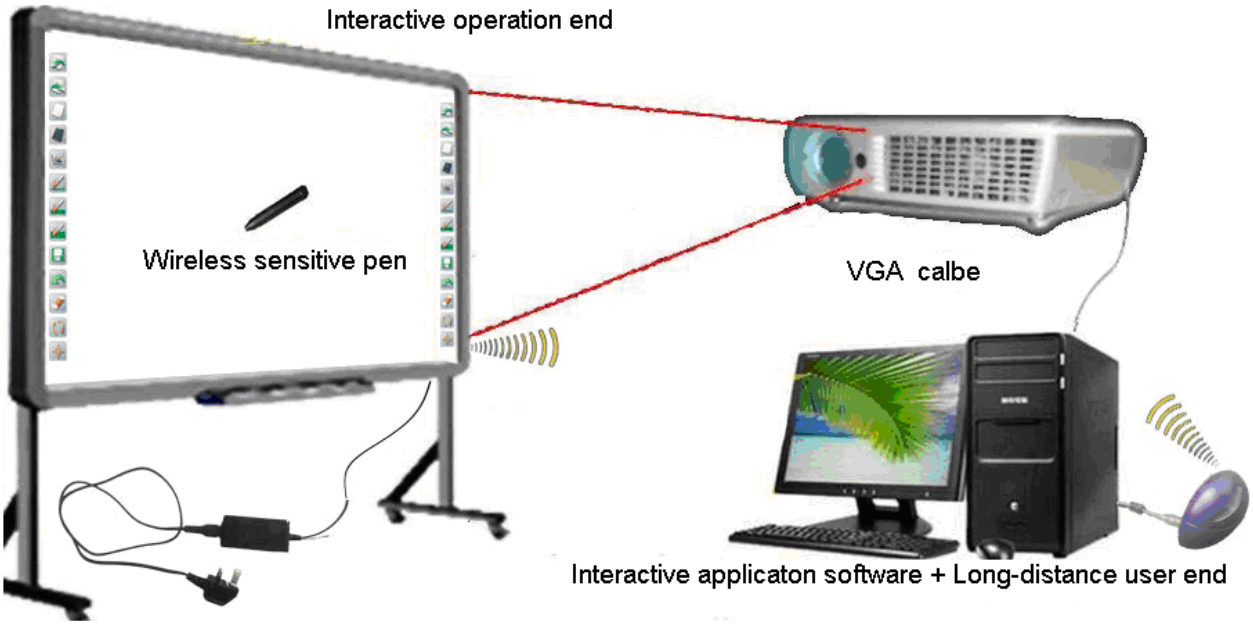
Step 2: Connect 5V power adapter to electromagnetic whiteboard.

Step 3: Plug wireless receiver to host computer's USB port.

Step 4: Connect computer and projector (refer to projector's user's manual).

Notes:

Wireless receiver's place position need ensure the distance between wireless receiver and whiteboard ≤15 meters and there is no barrier to block electromagnetic wave.



RF wireless connection figure

How to install and uninstall the software

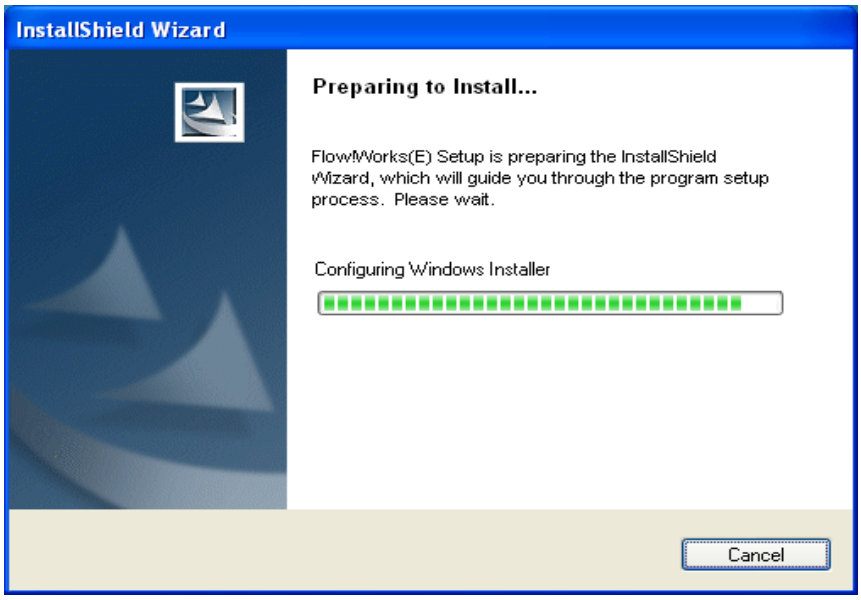
Install Software

Once whiteboard is connected to computer, the system will prompt “Find new hardware”, shown as below:

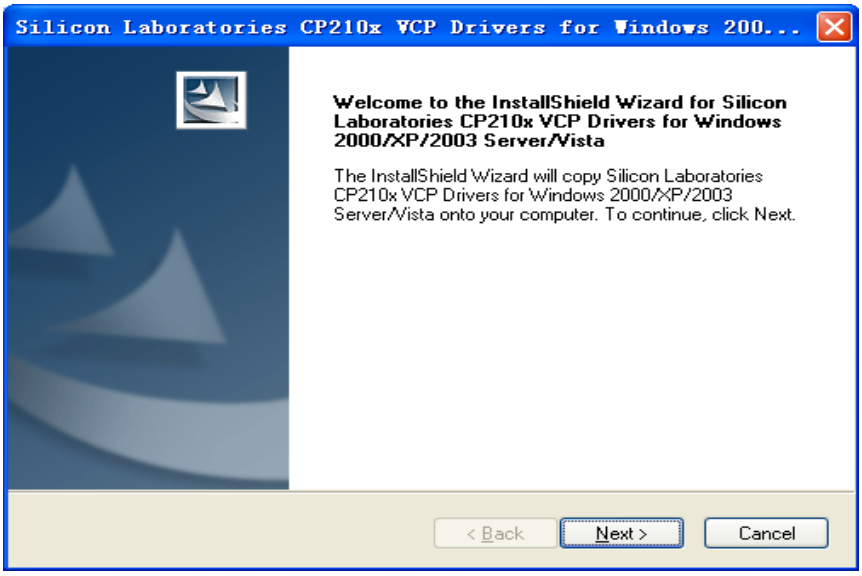
Click “Cancel”, please install software as below:

Insert the installation CD into the computer’s ROM, double click CD, the below dialog window appears:

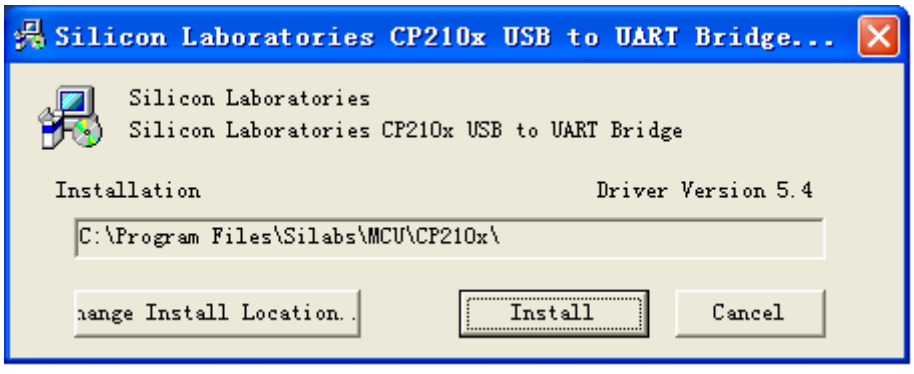
Click HiteBoard SoftWare, the below dialog window appears:



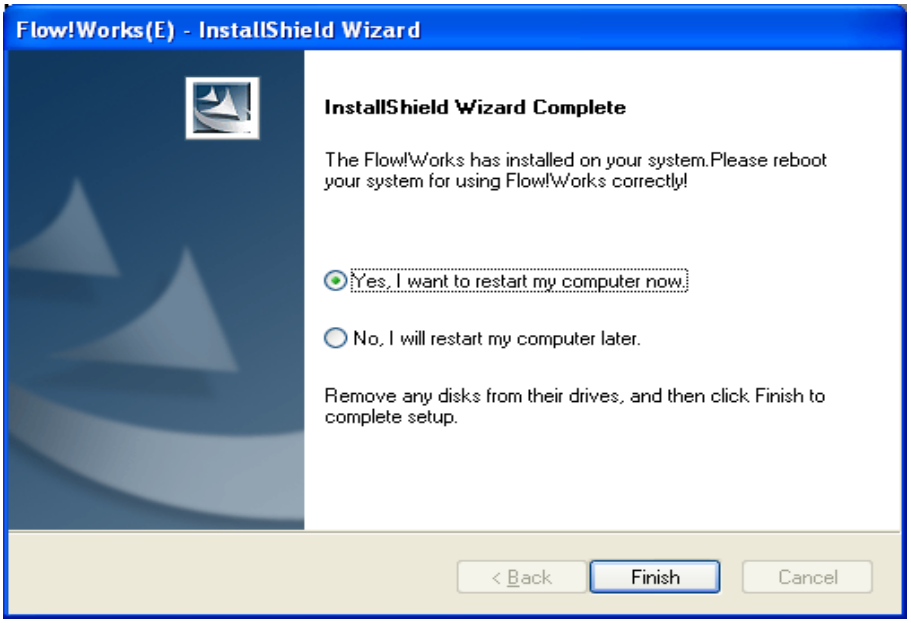
Follow screen prompt to finish application software installation, then start to install driver.



Click “Next” to install driver step by step:



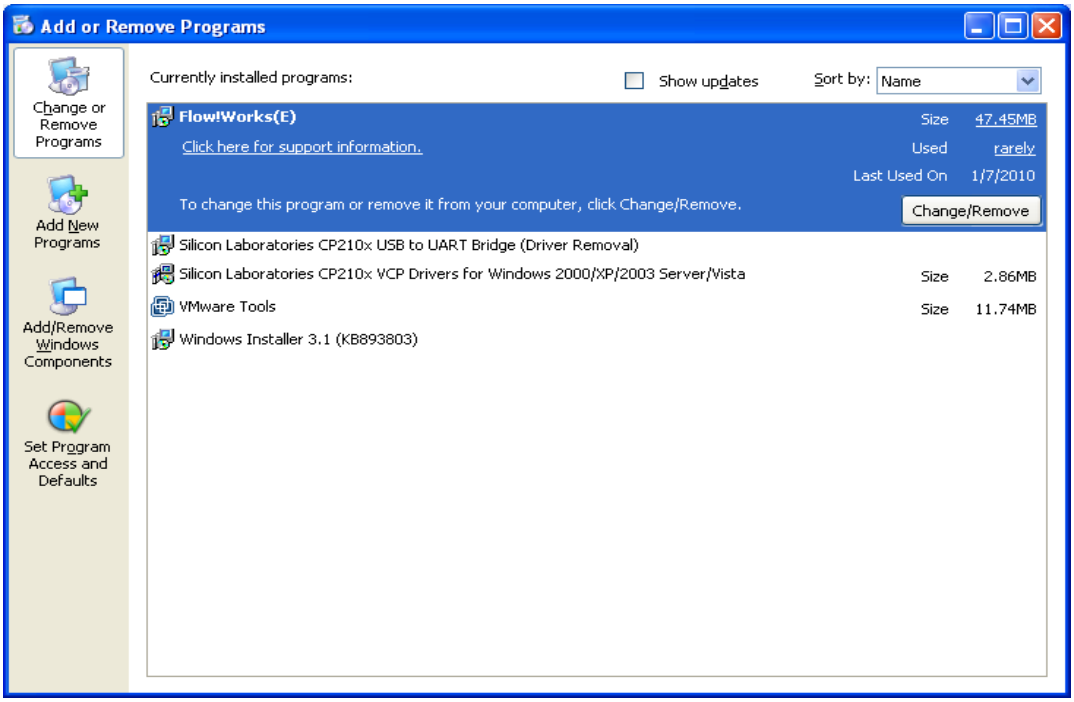
Click “Install” to install driver, after installation is finished, the below dialog window appears:



Please save other files and click "Yes，I want to restart my computer now." to restart computer, then the application software and driver have been installed successfully.

How to uninstall the software

If you want to remove the Whiteboard control software from your computer, please use "Add/Delete Program" in "Control Panel" to uninstall, select "Flow!Works(E)" and click "Remove/Delete" to uninstall the software.

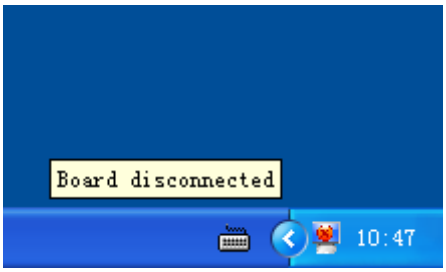


Search and bind whiteboard

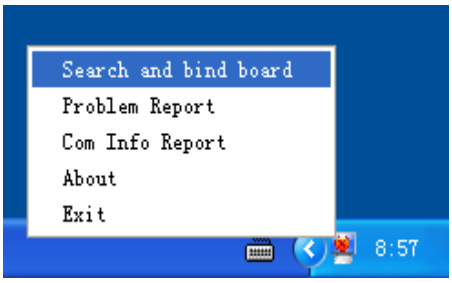
Tips: No need to search and bind software if you use USB or USB-COM connection.

If you use RF wireless connection, after finish software installation, you need search and bind software.

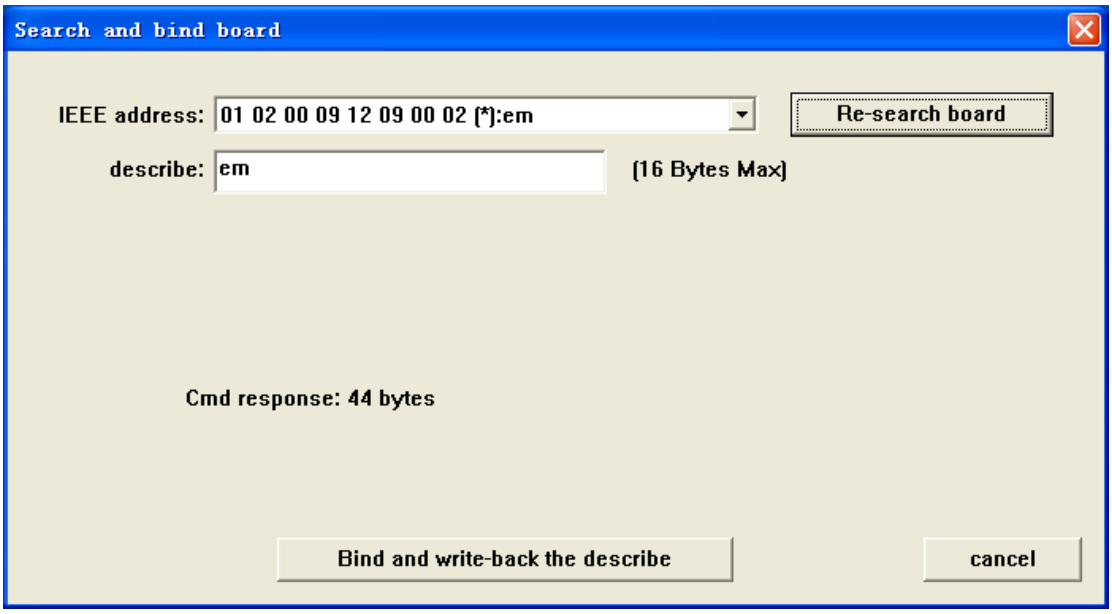
Step 1: Connect all hardware and whiteboard server program, the following prompt appears at the lower right task bar.



Step 2: Single click server icon, click “Search and bind”, shown as below:

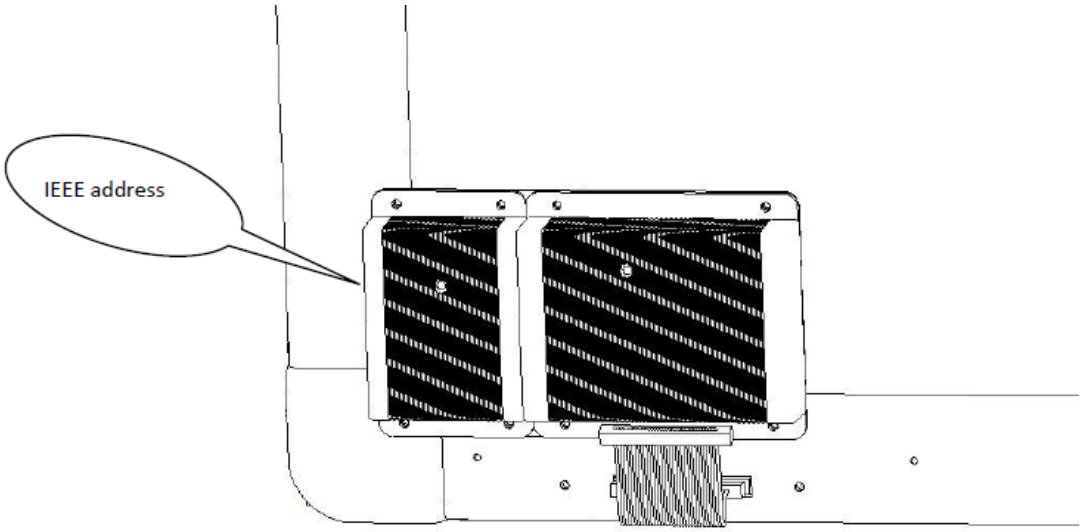


Step 3: Click “Re-search board” on dialog window:

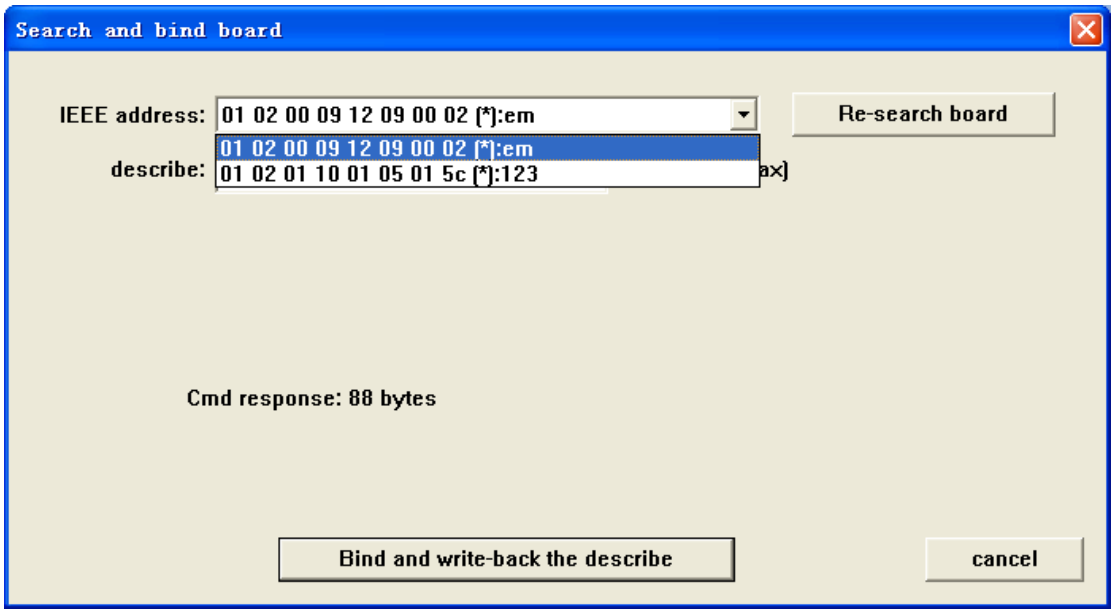


Step 4: Wait a moment, until “IEEE address” appears the whiteboard found. If it does not appear, please check if connection of hardware is good, then you can set a name of this whiteboard.

Step 5: Check whiteboard's IEEE address, the whiteboard main control box shows whiteboard's IEEE address.

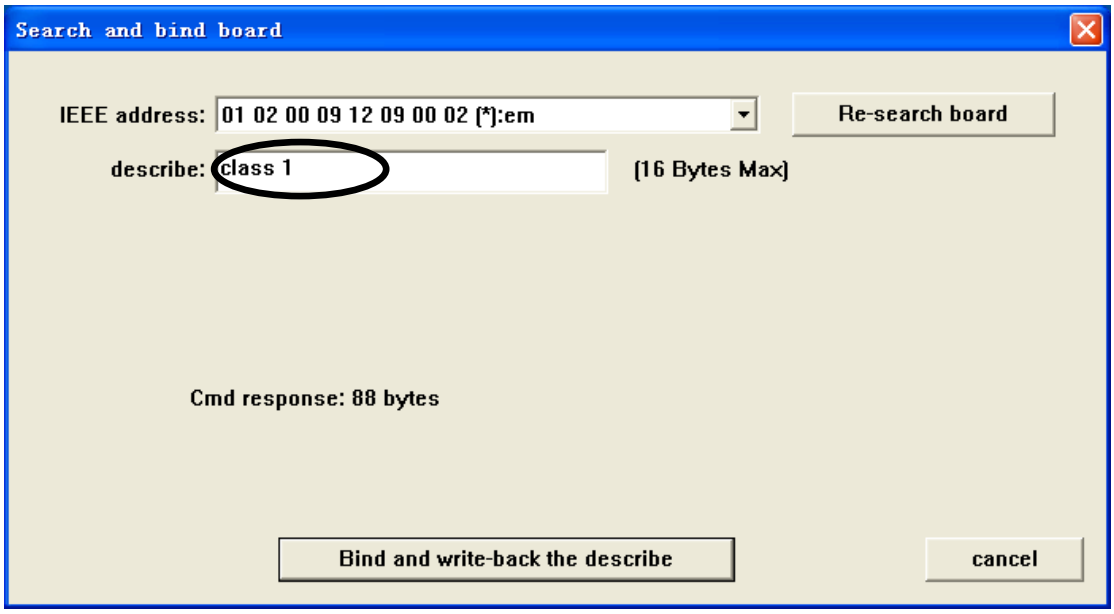


Step 6: Click to open pop down list and then you can select the whiteboard that you want to bind. For example: If you want to bind whiteboard with IEEE address is 01 02 00 09 12 09 00 02, please select 01 02 00 09 12 09 00 02 item on list.

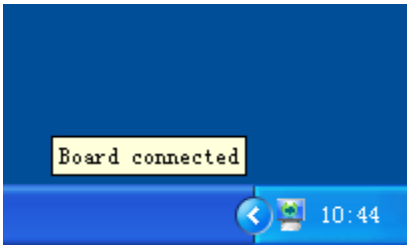


If you can not find its IEEE address on list, please click "Re-search board" and search again.

Step 7: The user can define a name for whiteboard in "describe", it can be blank. Then click "Bind and write-back the describe" and input description character.



After bind successfully, the server icon will turn to green:



Calibration

To make the whiteboard work normally, you must make sure the pen track in the projector accords with the actual pen track accurately. And calibration of pen function will get good writing accuracy. You need calibrate your Whiteboard for the below conditions:

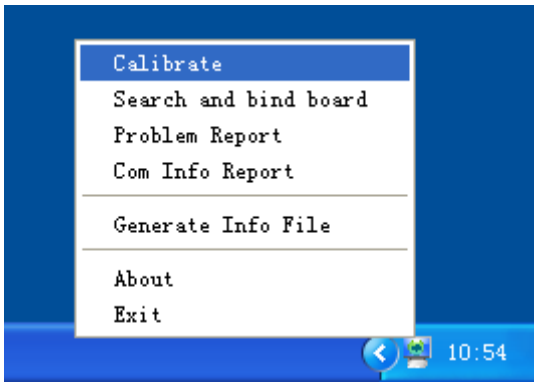
- The first time to use the Whiteboard
- After reinstall application software and driver
- When change the position of the Whiteboard
- When change the computer connected with the Whiteboard
- After change the resolution and frame rate of the computer

The whiteboard adopts the method of 9 points locate. The steps are as follows:

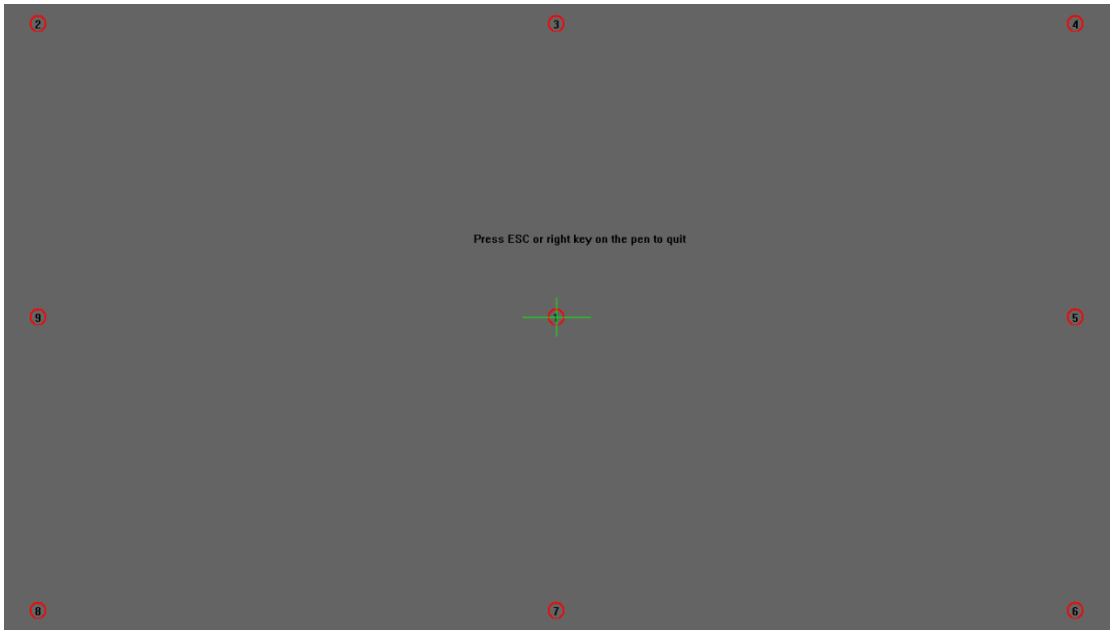
Step 1: Connect all the equipments and run the whiteboard driver program.

Step 2: Adjust the projector position to make the video project on the Whiteboard and make sure the projected area is within the range that can be displayed on the Whiteboard.

Step 3: Click the icon of the Whiteboard driver program at the lower right corner of the screen, a menu as followed will appear:



Click “Calibrate” to enter calibration screen, shown as below:



Step 4: Click the center of the flashing "十" with pen to make four "十"s stop flashing. This is a successful calibration. And according to the operation to calibrate the other three "十" one by one to finish the Whiteboard calibration.

Tips：

- Improper calibration will cause whiteboard can not work, please do calibration properly again.
- Click the key "ESC", you will cancel the calibration operation.
- For different model product, the calibration interface is a little different but calibration steps are same. The short-cut calibration is available on the whiteboard that has short-cut buttons. Please refer to calibration prompt to calibrate whiteboard.

*Two pen writing (optional)

If your purchased electromagnetic whiteboard has two pens writing function, please pay attention to below instruction:

- When you use two pens writing, need select hard pen or brush pen .
- You can use two pens writing on the whiteboard at same time.
- The computer system can not support two-mouse operation, so when the whiteboard is not in writing mode, two pens can not operate at same time.
- The pens are provided together with whiteboard, so can not exchange with other pens, please pay attention to different them.
- When you use two pens writing function, please make sure you are using special two pen writing software.

Problem Trouble Shooting

※Please refer to this list if your whiteboard use USB connection.

Problem Trouble Shooting			
Reason	**Reason**	**Reason**	**Try the following**
Whiteboard Do not work	There is no server icon at the lower right of the screen	Server program is not running	Run server program
		Server program is not installed	Install server program
	Server icon is red	Whiteboard is not connected to computer	Connect whiteboard to computer by USB cable
		Something wrong with server program	Uninstall server program and install server program again
	Server icon is green	Wrong calibration	Please calibrate again
		Pen battery has bad connection	Take off battery and install again.
		Pen battery has not power	Replace battery or charge pen.
		The writing pen is damaged	Replace pen
The calibration points can not appear	Can not see green “ ＋ ” cursor on whiteboard	The projector vertical adjustment or horizontal adjustment is not correct, it caused some part of screen overstep whiteboard projection area	Adjust projector
Can not write	Can see mouse pointer move, but there is no stroke	The software is not in writing mode	Switch to writing mode
		The pen tip did not been pressed	Press pen tip on screen when you write
	Under desk mode, can see mouse pointer move, but under writing mode, can not write	pressed right button on pen when you write	Please do not press right button on pen when you write
		stroke color is same to background color	Change stroke color or background color
Wireless pen can write, but there is warp	Only some area has warp	Wrong calibration	Calibrate again
		Projection screen has distortion	Adjust projector

Wireless pen can write but very slow	The stroke is slow than pen tip	Caused by anti-virus software	Close anti-virus software
		The computer is running too many software	Close some software you do not use
		The computer setting is too low	Please update computer hardware
Spiking stroke	There is spiking stroke when you write	There is strong magnetic interference	Remove the interference source or change a new environment without interference.
		The writing pen is damaged	Replace pen

※Please refer to this list if your whiteboard use wireless connection.

Problem Trouble Shooting			
Reason	**phenomenon**	**Reason**	**Try the following**
Whiteboard Do not work	There is no server icon at the lower right of the screen	Server program is not running	Run server program
		Server program is not installed	Install server program
	Server icon is red	Whiteboard is not connected to computer	Connect whiteboard to computer by USB cable
		Something wrong with server program	Uninstall server program and install server program again
	Server icon is green	Wrong calibration	Please calibrate again
		Pen battery has bad connection	Take off battery and install again.
		Pen battery has not power	Replace battery or charge pen.
		The writing pen is damaged	Replace pen
The calibration points can not appear	Can not see green “十” cursor on whiteboard	The projector vertical adjustment or horizontal adjustment is not correct, it caused some part of screen overstep whiteboard projection area	Adjust projector
Can not search and bind whiteboard	Can not search whiteboard	DC 5V power adapter could not supply power to whiteboard	Connect DC 5V power adapter to supply power to electromagnetic board.
		Wireless receiver did not plug on computer	Connect computer and wireless receiver with USB cable
		There is some block between wireless receiver and whiteboard that can shield electromagnetic wave	Adjust wireless receiver’s position and make sure good communication between whiteboard and wireless receiver
		The connection between computer and electromagnetic whiteboard is broken.	Shut off whiteboard’s power or wireless receiver’s power, bind the whiteboard again.
		The distance between wireless receiver and whiteboard is more than 15 meters	Adjust distance between wireless receiver and whiteboard.

Whiteboard is disconnected suddenly during use	The server program changes to red during work	When there is many whiteboard around yours, others bound your whiteboard wrongly	Please bind your whiteboard again and remind others do not bind your whiteboard.
Can not write	Can see mouse pointer move, but there is no stroke	The software is not in writing mode	Switch to writing mode
		The pen tip did not been pressed	Press pen tip on screen when you write
	Under desk mode, can see mouse pointer move, but under writing mode, can not write	pressed right button on pen when you write	Please do not press right button on pen when you write
		stroke color is same to background color	Change stroke color or background color
Wireless pen can write, but there is warp	Only some area has warp	Wrong calibration	Calibrate again
		Projection screen has distortion	Adjust projector
Wireless pen can write but very slow	The stroke is slow than pen tip	Caused by anti-virus software	Close anti-virus software
		The computer is running too many software	Close some software you do not use
		The computer setting is too low	Please update computer hardware
Spiking stroke	There is spiking stroke when you write	There is strong magnetic interference	Remove the interference source or change a new environment without interference.
		The writing pen is damaged	Replace pen
Eraser can not work	Eraser can not work	Eraser is in stand by mode	Please press active button before use
		Eraser battery has not power	Replace battery

Questions and Answers

What kinds of projector should I use?

You can use any projector that can project the computer image on the Whiteboard, including LCD project with high resolution and LCD board projector in lower price. Make sure the projector supports the resolution of the computer and 650ANSL is enough.

What should I do if I write on the Whiteboard by the water pen or permanent pen that can not be erased?

The whiteboard has two kind of surface: erasable surface and non-erasable surface. For Erasable surface whiteboard, you can use water pen to write, but can not use permanent pen to write. For non-erasable surface whiteboard, can not use water pen or permanent pen to write. In case such things happen, please use a little alcohol to erase.

How to clean the surface of the Whiteboard?

Please use the dishcloth with a little water to clean the surface of the whiteboard and don't let the water seep into the Whiteboard inside from the bottom frame.

What's the requirement of the place where install the Whiteboard?

- There is no magnetic field in the place where install the Whiteboard.
- If you will fix the whiteboard on the wall, the wall must be upright.
- The place must be dry.
- Avoid straight sunshine.
- For RF wireless connection whiteboard, there is no block between wireless receiver and whiteboard that can shield electromagnetic wave.

Specification

Model	QWB200EM	QWB300EM	QWB100WSEM
Frame size	88″	96″	100″
Technology	Electromagnetic	Electromagnetic	Electromagnetic
Writing method	Wireless electromagnetic pen(two pen writing)	Wireless electromagnetic pen(two pen writing)	Wireless electromagnetic pen(two pen writing)
Aspect Ratio	4:3	4:3	16:9
Sensitive area size	83″ (1740*1200mm)	92″ (1920*1320mm)	96″ (2130*1200mm)
Resolution	17400*12000	19200*13200	21300*12000
Hardware Resolution	100points/cm 254points/inch	100points/cm 254points/inch	100points/cm 254points/inch
Hot Key	Two sides	Two sides	NA
Track Speed	5m/s,200inch/s	5m/s,200inch/s	5m/s,200inch/s
Response Speed	<8ms	<8ms	<8ms
Cursor speed	Real time response wireless pen's click, simulate mouse operation	Real time response wireless pen's click, simulate mouse operation	Real time response wireless pen's click, simulate mouse operation
Location accuracy	0.1mm	0.1mm	0.1mm
Power consumption	< 2W	< 2W	< 2W
Projection Area Size	79″ (1600*1200mm)	87″ (1760*1320mm)	96″ (2130*1200mm)
Port	USB/RF (confirmed by connection box)	USB/RF (confirmed by connection box)	USB/RF (confirmed by connection box)
Whiteboard Size	1820*1280*34mm	2000*1400*34mm	2210*1280*34mm
Operation System	Win2000/2003/XP/Vista/ Win 7 32bit or 64bit	Win2000/2003/XP/Vista/ Win 7 32bit or 64bit	Win2000/2003/XP/Vista/ Win 7 32bit or 64bit
Accessory	Wireless pen/wall mounting parts/U S B extended cable	Wireless pen/wall mounting parts/U S B extended cable	Wireless pen/wall mounting parts/U S B extended cable

	Stand(optional)/Eraser /Pen holder	Stand(optional)/Eraser /Pen holder	Stand(optional)/Eraser /Pen holder
Optional	Wireless connection box, wireless dongle, 5V power adapter, COM port connection box, 15M special USB-COM cable	Wireless connection box, wireless dongle, 5V power adapter, COM port connection box, 15M special USB-COM cable	Wireless connection box, wireless dongle, 5V power adapter, COM port connection box, 15M special USB-COM cable
Working temperature	-20℃~ 50℃	-20℃~ 50℃	-20℃~ 50℃
Working humidity	15%*90%	15%*90%	15%*90%
Storage temperature	-20℃~ 55℃	-20℃~ 55℃	-20℃~ 55℃
Storage Humidity	15%*90%	15%*90%	15%*90%
Frame Material	Grey, Aluminum	Grey, Aluminum	Grey, Aluminum
Two Pen Writing	Support (Decided by main control box)	Support (Decided by main control box)）	Support (Decided by main control box)
Packing dimension	2110*1410*120mm	2290*1530*120mm	2500*1410*120mm
Net Weight	25Kg	28Kg	30Kg
Gross Weight	36Kg	40Kg	42Kg

Note: The design and specifications are subject to change without notice.

If you want to learn more about our products, please visit our website:
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support@qomo.com

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