



Interactive Kit

IK-1

Owner's Manual & Installation Procedures

Safety Precautions

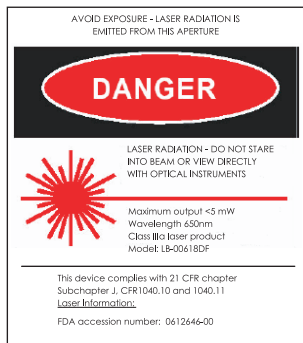
Before installing and operating EIKI interactive Kit, IK-1, read this manual thoroughly.

The IK-1 provides many convenient features and functions. Operating the IK-1 properly enables you to manage those features and maintain it in good conditions for many years to come.

Improper operation may result in not only shortening the product life, but also malfunctions or other accidents.

Safety Precautions

- a) Do not expose the product to heat or moisture.
- b) Protect the product from excessive shock.
- c) If there are any abnormalities (abnormal noise, smell, smoke etc.) on the product, disconnect USB cable and contact your EIKI dealer.
- d) Do not use damaged USB cable. This may cause short circuits or electrical shock.
- e) Do not modify this product for any purpose.
- f) Never attempt to repair the product by yourself. Please contact your EIKI dealer for servicing.
- g) Avoid installing the product in locations exposed to strong magnetic fields, or electrical currents.
- h) Do not touch the product or USB cable with wet hands.
- i) Replace the batteries with the same type only.
- j) Make sure the plus and minus terminals are correctly aligned when loading new batteries.
- k) Never look directly into the laser light while a laser is emitted, otherwise eye damage may result.



Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- a) Reorient or relocate the receiving antenna.
- b) Increase the separation between the equipment and receiver.
- c) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- d) Consult the dealer or an experienced radio/TV technician for help.

Use of shielded cable is required to comply with class B limits in Subpart B of Part 15 of FCC Rules. Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Model Number (s) : IK-1

Trade Name : EIKI

Responsible party : EIKI International, Inc.

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A. Product Overview

1) Product description

Thank you for using EIKI Interactive Kit, IK-1. It is an innovative breakthrough based on opto-electrical technology. Presentations can be controlled more effectively and directly on-screen without the need to move back and forth between the computer and screen. EIKI Interactive Kit, IK-1, provides remote writing and control, completely substitute mouse and chalk, and achieve various teaching or demonstration effects when working with electronic whiteboard software available in the market.

2) Accessories included

- a) Electronic pointer (long)
- b) Signal pen (short)
- c) Receiving device
- d) Installation CD Software Driver
- e) 2m USB cable
- f) Owner's Manual (this leaflet)
- g) 2x AA batteries

Optional Parts:

- a) Installation ceiling bracket
- b) 20m USB cable



B. Hardware and Software Requirement

1) Hardware requirement

- a) CPU: based on X86, Pentium 166 and above.
- b) Memory: 64MB RAM (128 MB RAM is recommended)
- c) Hardisk Space: 30MB free space.

2) Software requirement

- a) Support Window 98 / 2000 / XP / 2003 application / Vista.

3) Before EIKI Interactive Kit, IK-1 Software Driver Installation for Windows 98

- a) After connect EIKI Interactive Kit, IK-1 with USB Cable to USB Port, your system will automatically detect the new hardware.
- b) Follow instructions, select "searching for the latest Windows program version"
- c) Follow instruction.

If you have Windows 98 CD Driver, just insert into your CD ROM and select Search CD ROM.

If you choose to browse the internet for latest Windows, choose " Microsoft Windows Update"

If you have pre-installed with Windows 98, browse to the path.

- d) Click "Next", your system will install with "HIDDEV.INF", after installation, click "Next", after that just click "Finish"

C. Before using IK-1

1) Ambient light

Eiki Interactive Kit, IK-1 utilizes Infra-Red (IR) light emitted from the tip of the pen/pointer. And the IR receiver on the IK-1 receives the IR and identifies the location against the screen. Therefore IK-1 receiver has to be located so that the IK-1 receiver's view covers the entire screen fully. IK-1 receiver's view can be identified by the red dots projected by IK-1 receiver. The recommended distance between each dot and each edge of the screen is 20% of the screen width.

On the other hand IR is also emitted from lighting lamps and the sun through windows. If IR receiver receives the IR from the lamps or the sun, IK-1 does not work well. Therefore the lamps or the window should not be in the IR receiver's view. If something reflects the light from the lamp or through the window, it should not be in the IR receiver's view either.

2) Positioning IK-1

The important point is to locate the light axis of the projector lens and IK-1 as close as possible. The best position is on the top of the projector, if the receiver's view can fully cover the screen.

The next will be in front of the projector, where IK-1 is located a little above or under the light axis of the projector. If either one is not possible, locate IK-1 beside the projector.

If the presenter stands mainly on the left side of the screen, located IK-1 on the opposite side (right) so that the presenter does not block the receiver's view.

D. Start using IK-1

1. Activation of EIKI Interactive Kit, IK-1 Software

1-a. Run from CD-ROM

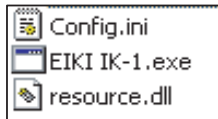
Insert installation software CD into your CD drive, go to "My Computer" & double click on the CD ROM Drive.

Double click on EIKI IK-1.exe to execute the IK-1 software.

1-b. Run from your PC

Insert installation software CD into your CD drive, go to "My Computer" & double click on the CD ROM Drive.

Drag and drop 3 files from CD-ROM to the desk top on your PC.



Double click on EIKI IK-1.exe to execute the IK-1 software.

Then the following will appear.

1. Control panel for IK-1 with 8 icons on the desktop.
2. IK-1 icon in the task bar in the bottom of desktop.



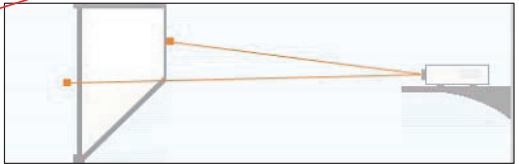
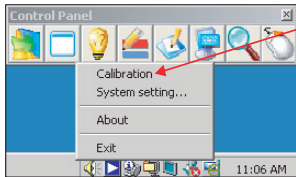
3. Connect PC and IK-1 receiver with the USB cable supplied.

2. Calibration

Calibration is required before using IK-1.

By the calibration IK-1 learns the position and the dimension of the screen. Therefore once this is done, if the position of the screen, projector and the IK-1's receiver is fixed, no more calibration is required from next time.

Start calibration by right clicking IK-1 icon in the task bar and selecting "calibration"



Then laser beams are projected by the IK-1 receiver on the screen, this should guide the user to locate the red spot apart from the side of screen by $\frac{1}{5}$ screen width.



"Suspend install Setting" is for fixed installation.

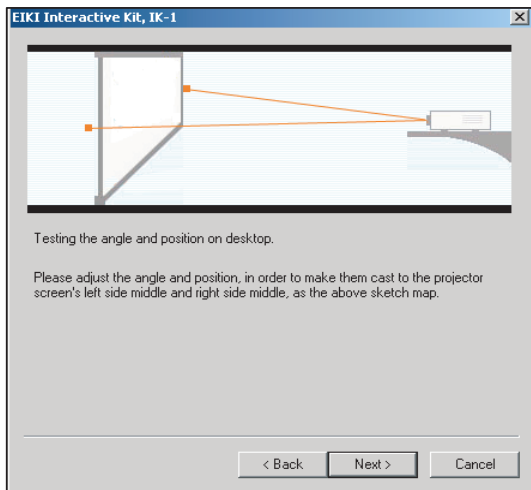
"Desktop install setting" is for portable usage.

Choose one and then click "Next".

Positioning the IK-1 receiver.

Follow the instruction so as to locate the red dots beside the screen as shown in the figure.

For Desktop Installation



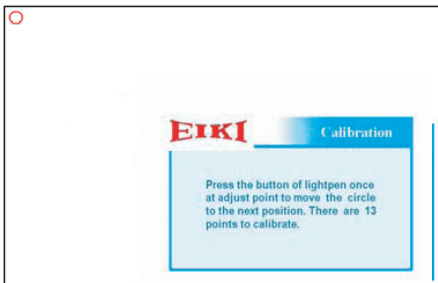
Locate red dots beside the red \leq \Rightarrow marks on the screen.

Each dot should be located apart from the screen by 1/5 screen width.

By pulling back the receiver the space between two red dots can be widened.

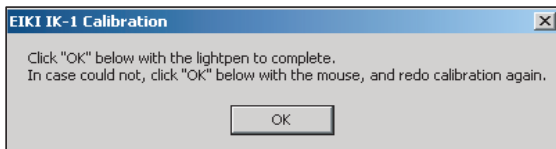
By lifting the receiver body against its stand the dots can be pulled up.

Then click "Next".



Then a white field is shown with small red circle in the top right corner. Follow the instruction below.

Please aim lightpen at adjust point and press the left key of lightpen and finish calibration in turn. Place the tip of the pointer in the center of the red circle and press the button on the pointer once. Then the circle moves to the next position. Repeat this until the white field closes.



The calibration for IK-1 is going to complete. Click "OK" below with the pointer to close this dialog. If you cannot do it, close it with your mouse and redo calibration again.

For Suspend Installation



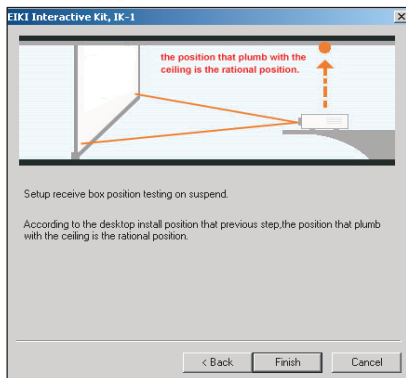
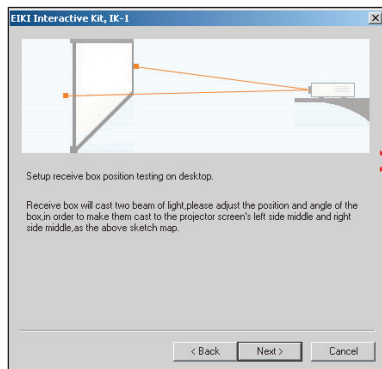
Follow instructions and click "Next".



"Setup Receive Box" help you confirm, debug the suspend install setting of the receiving box.

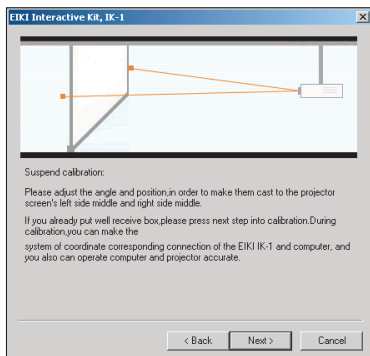
"Receive box's angle adjust and calibration help you operate EIKI IK-1 and computer accurately. Be applied to the first use of suspend install of projector, projector screen, EIKI IK-1 signal receive box or screen resolution altered.

For Setup Receive Box

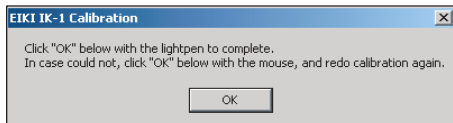
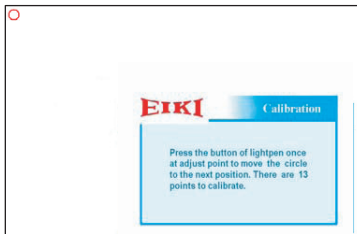


Follow instruction & click "Next", then click "Finish" to end the installation.

For Receive box's angle adjust and calibration



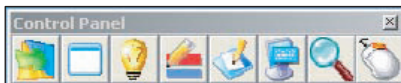
Follow instructions & click "Next".











Follow instructions & click "Next", then click "OK" to end the installation.

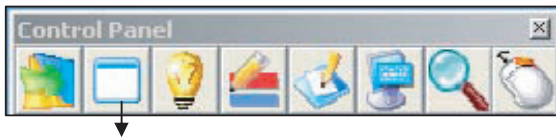
E. Application

Control Panel

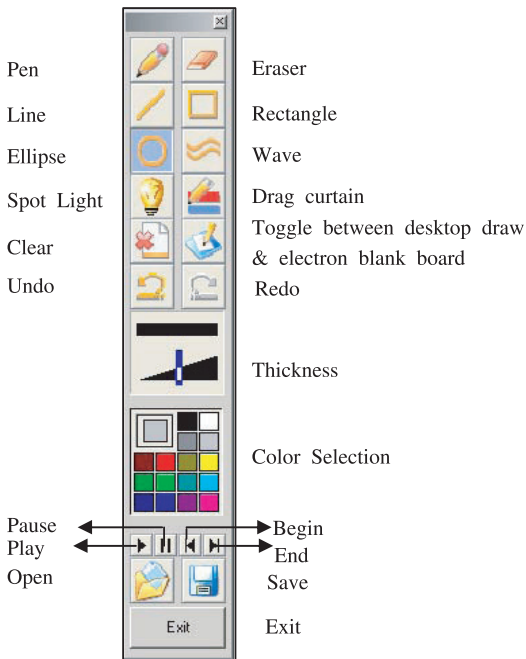























Icon	Function
1) Hide and show control panel	 Show all or most left icon
2) Electron Blank Board	 Show white blank background with tool bar
3) Spot Light	 Show only the area through circle or square (frame can be changed by double clicking) Circle or square moves to the clicked area Size of circle or square can be changed by dragging
4) Drag curtain	 Put black curtain on the screen. By dragging white part each side of curtain can be dragged to the center
5) Desktop draw	 Allow drawing on desktop with tool bar
6) Screen keyboard	 For typing letters
7) Magnifying glass	 Shows magnified image
8) Right click	 Just after selecting this icon right clicking can be done (the color of right button is changed from brown to blue when activated)

The Control Panel will appear by double click on EIKI Interactive Kit, IK-1, icon. If you have closed the Control Panel, just left click on EIKI Interactive Kit, IK-1, icon and select show control panel or double click on EIKI Interactive Kit, IK-1, icon.



Click on Electron Blank Board, and the writing tools icon will appear.



Icon	Function	Icon	Function
Pen	 Draw line	Eraser	 Erase part
Line	 Draw straight line	Rectangle	 Draw rectangle by dragging
Ellipse	 Draw ellipse by dragging	Wave	 Draw wave line
Spot Light	 Show only the area through circle or square (frame can be changed by double clicking) Circle or square moves to the clicked area, size of circle or square can be changed by dragging	Drag curtain	 Put black curtain on the screen. By dragging white part each side of curtain can be dragged to the center
Clear	 Erase all	Toggle between desktop draw & electron blackboard	 Toggle the background between blank white and desktop
Undo	 Go one step backward in drawing Broken line is considered as 2 elements Undo hides the latest element	Redo	 Go one step forward in drawing (after Undo was done) Redo shows what was hidden lately
Thickness	 Click the part of triangle to change	Color	 Selected color is shown in the top left box
Play	 Play back all of elements shown in the original speed from the beginning after Pause is selected, Play resumes playing back.	Pause	 Stop the play back
Begin	 Go to the status before drawing	End	 Show completed drawing
Open	 Open the saved drawing file	Save	 Save the drawing
Exit	 Close the tool bar		

How to use the pen/pointer to control mouse or draw line

Pointer - While the button is pressed, IR signal is emitted. This is good for soft screen.

Pen - While the white tip is tilted or pressed against solid screen, IR signal is emitted.

Mouse control

Left click

After placing the tip on the target, press and release the button on the pointer.

Press and release the tip of pen on the target.

Right click



Right Click Mouse

After selecting Right-click in the Control Panel do the following.

After placing the tip on the target, press and release the button on the pointer.

Press and release the tip of pen on the target.

Double click

After placing the tip on the target, press and release the button twice on the pointer.

Press and release the tip of pen twice on the target.

Changing function of the mouse pointer to pen

By selecting either "Desktop Draw" or "Electron Blank Board" in the "Control Panel", the tool bar for drawing is displayed and the function is changed to pen from mouse pointer.

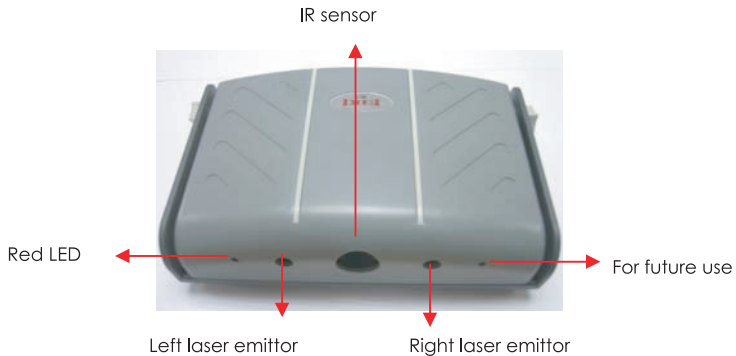
By closing drawing tool bar with "Exit" button or "x" button, the function is changed to mouse pointer from pen.

How to draw



After placing the tip of the pointer on the target, while holding the button pressed, move the tip as you like and release the button at the end.

After placing the tip of the pen on the target while holding the tip pressed on the screen, move the tip as you like and release the tip at the end.



Red LED

This LED is lit up when connected to PC through USB cable.

Green LED

This is for future use

Left & Right laser emitter

This projects red dot on the left & right hand side of the screen

IR sensor

This detects the IR from the pen/pointer.

The IK-1 icon in task bar shows the status as follows

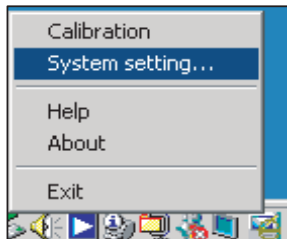


Not connected with IK-1 receiver

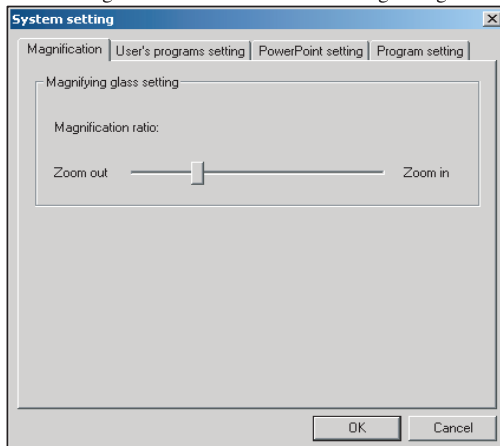
Connected with IK-1 receiver and ready for use

System Setting

Open System setting by right clicking IK-1 icon in the task bar and selecting "System Setting".



Select "Magnification" sheet tab to change magnification.



Select "User's Programs Setting" sheet tab in order to add shortcut for the application.

The image shows a 'System setting' dialog box with a blue title bar and a close button. It has four tabs: 'Magnification', 'User's programs setting' (which is selected), 'PowerPoint setting', and 'Program setting'. The 'User's programs setting' tab contains a section titled 'user's programs' with a table for adding shortcuts. The table has three columns: 'Application Name', 'Application', and 'Path'. Below the table is a horizontal scrollbar. Under the table, there are four input fields: 'Program path:' with a 'Browse...' button, 'Program name:', 'Run parameter:', and 'Run list:'. At the bottom of the 'user's programs' section are 'Add' and 'Remove' buttons. At the bottom of the dialog box are 'OK' and 'Cancel' buttons.

Application Name	Application	Path
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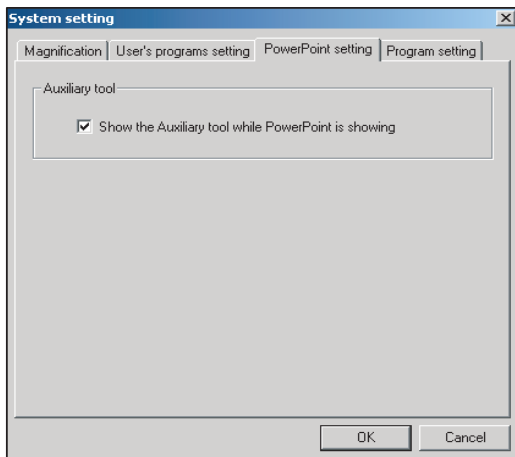
Program path:

Program name:

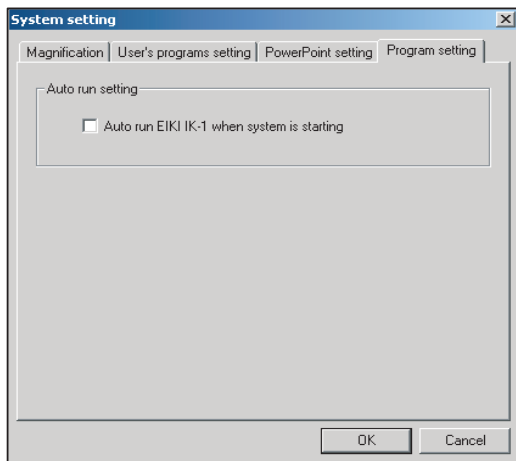
Run parameter:

Run list:

Select "Power Point Setting" sheet tab to show the auxiliary tool while PowerPoint is showing



Select "Program Setting" sheet tab in order to set auto run EIKI IK-1 when the system is starting



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