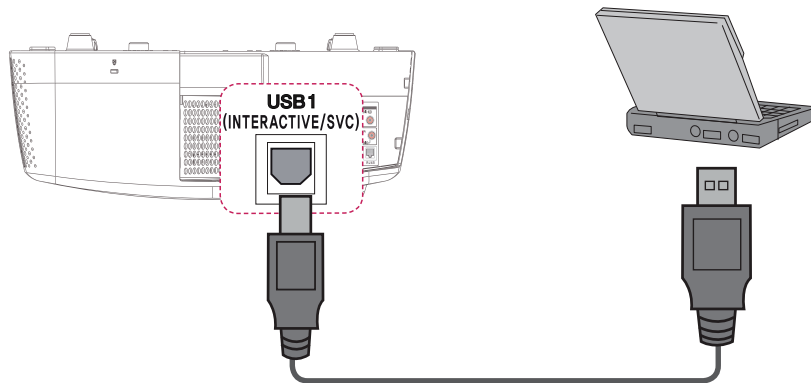


(For SA565 only)

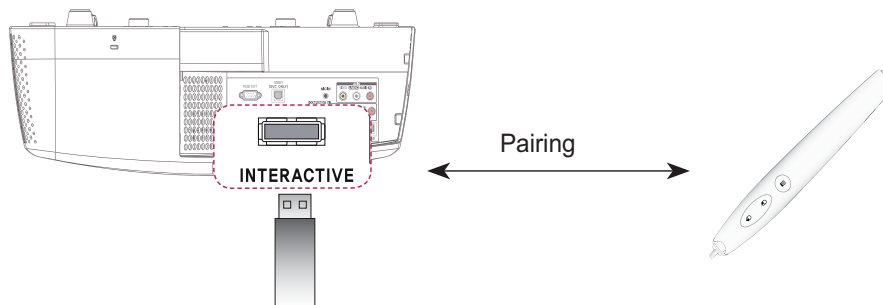
Interactive Function

To Connect the Interactive Pen to the PC

Connect the USB A to B cable from the projector's USB 1(INTERACTIVE/SVC) port and a PC USB port.



Connect the interactive dongle to the projector's **INTERACTIVE** port.



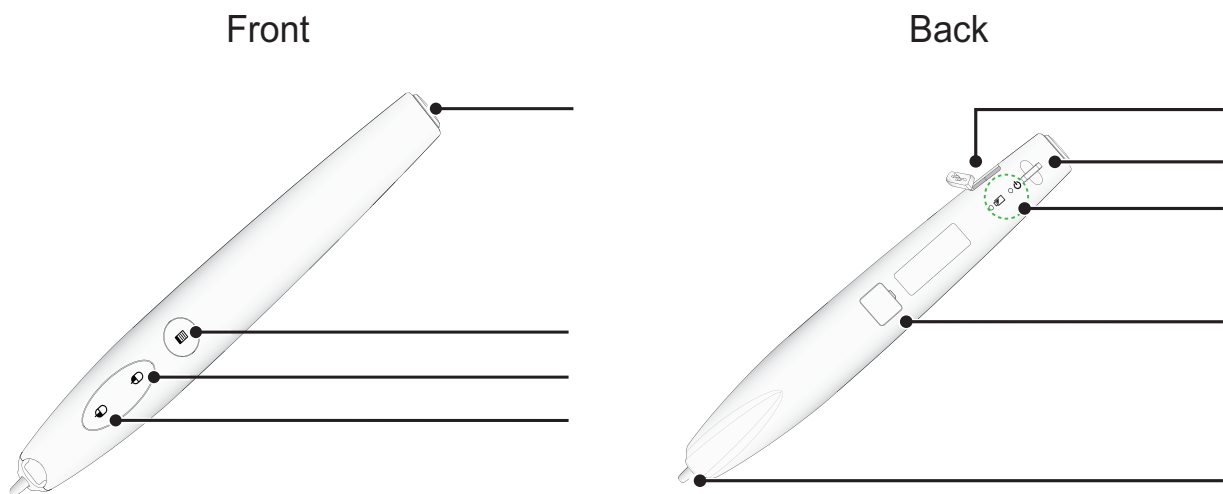
CAUTION






- Up to two pens can be used at the same time.
- Pairing is not available when one of the paired pens is in use.
- In the Fixed Pairing mode, up to 10 pens can be paired one at a time.
- You must install the WizTeach program in the CD provided with the accessories on your PC before using the Annotation Software .
- If the interactive pen is not used for more than 30 seconds, it will switch to low power mode. Press any button to return the pen to normal mode.
- Use the remote control within the specified range (see "Operating Range with Interactive Pen"). You may experience communication failures when using the device outside the coverage area or if there are obstacles within the coverage area.
- You may experience communication failures depending on the accessories. Devices such as a microwave oven and wireless LAN operate in the same frequency band (2.4 GHz) as the interactive pen. This may cause communication failures.
- Make sure not to block the image when using the interactive pen.

(For SA565 only)

Using The Interactive Pen









Interactive Pen and Button



Function/ Button		Description
	Power Button	Turns the interactive pen on/off.
		Used for pairing.
		Functions the same as a right mouse button.
		Functions the same as a left mouse button.
	USB charging port	Charges the product using the charging cable.
	Eyelet for strap	Connects the strap to the interactive pen.
	LED Indicators	 Shows the battery status.
		 Shows the pen status.
	Firmware upgrade port	Used to upgrade the interactive pen firmware for maintenance.
	Pen tip	You can write text or draw figures using the Pen tip.

(For SA565 only)

Using the Interactive Pen Button

Function	Description
Left Mouse Click	Press the  button or push the Pen tip.
Right Mouse Click	Press the  button.
Enter Fixed mode	Go to Interactive and set Pairing Mode to Fixed . Then, press and hold the  button more than three seconds within ten seconds.
Enter Open mode	Press both the pen's  button and  button simultaneously for 3 seconds.
Wake Up	Press any one of the  button,  button, or  button. Or, push the pen tip.

- Make sure that the interactive pen is not pointing toward the screen when entering each mode.



CAUTION

- If there are foreign objects or dust on the lens at the tip of the interactive pen, gently wipe with a cotton swab.
- Foreign objects or dust on the lens surface may cause malfunction of the interactive pen.

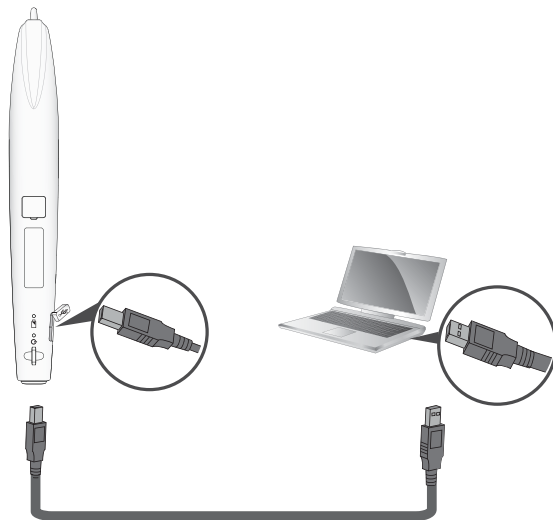
(For SA565 only)

To Charge the Interactive Pen

To charge the battery, connect the interactive pen to the PC with the charging cable.
(Check that the PC is turned on before connection.)

The battery light stays on during charging and will turn off when charging is complete.

When charging is complete, disconnect the charging cable in order to use it. Alternatively, use the interactive pen while connected by the charging cable if charging is not complete.



- Warning message (low battery)
 - When the battery voltage is 3.6 V or lower, the low battery warning message is displayed. The interactive pen will work for about 10 minute after this message is displayed.
 - The interactive pen may not work when the battery level is 3.4 V or lower.
- When you use the pen for the first time, charge the battery for at least 3 hours. The fully charged battery lasts 20 hours when it is continuously used, or four weeks in standby mode.

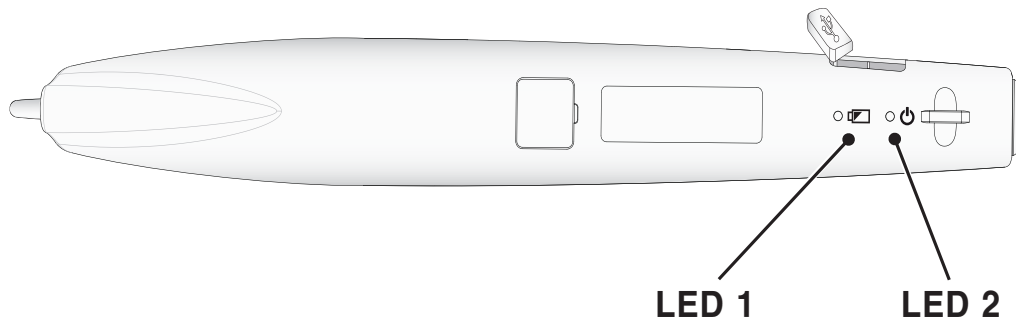


WARNING

- Do not replace or repair the battery yourself.
- To charge the interactive pen, use the charging cable provided to connect the pen to USB port of the PC.

(For SA565 only)

Description of LED Interactive Pen Indicators



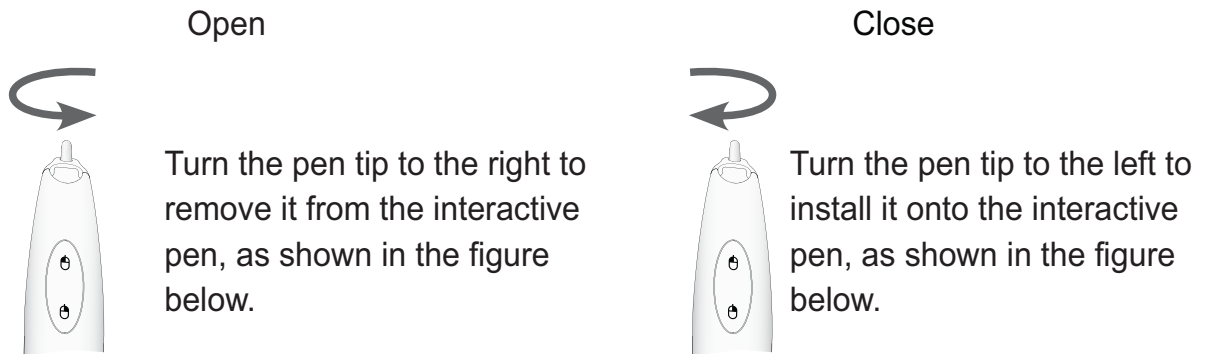
Pen Operation	LED Indicators	
	🔋 (LED 1)	⏻ (LED 2)
Charging battery	The green light is on	-
Battery charging required	적색등 LED 4초마다 1회씩 깜박임	-
Open Mode - Searching a projector to connect	-	The green light quickly flashes twice per second.
Fixed Mode - Searching a projector to connect	-	The green light flashes twice at fixed intervals every second.
Attempting to pair	-	The green light flashes very quickly.
Enter Open mode, or pairing is complete	-	The green light slowly flashes three times.
Pairing failed	-	The red light slowly flashes five times.
The pen is connected to the projector	-	The green light flashes every three seconds.
When the pen is pointing the projector screen	-	The red light is on or flashing quickly.
Entering low power mode	The red light has flashed once.	The red light has flashed once.

- LED 1 relates to the battery for the interactive pen and LED 2 relates to the operation status of the interactive pen.

(For SA565 only)

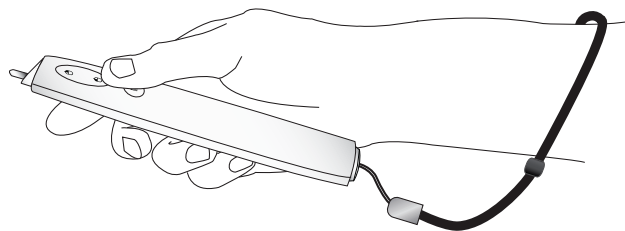
To Replace the Pen tip

When the pen tip is worn out, replace it as shown in the figure below.



How to Use the Strap

Use the strap to prevent dropping the interactive pen. Use the pen safely so as not to cause injury or damage to nearby objects.



CAUTION

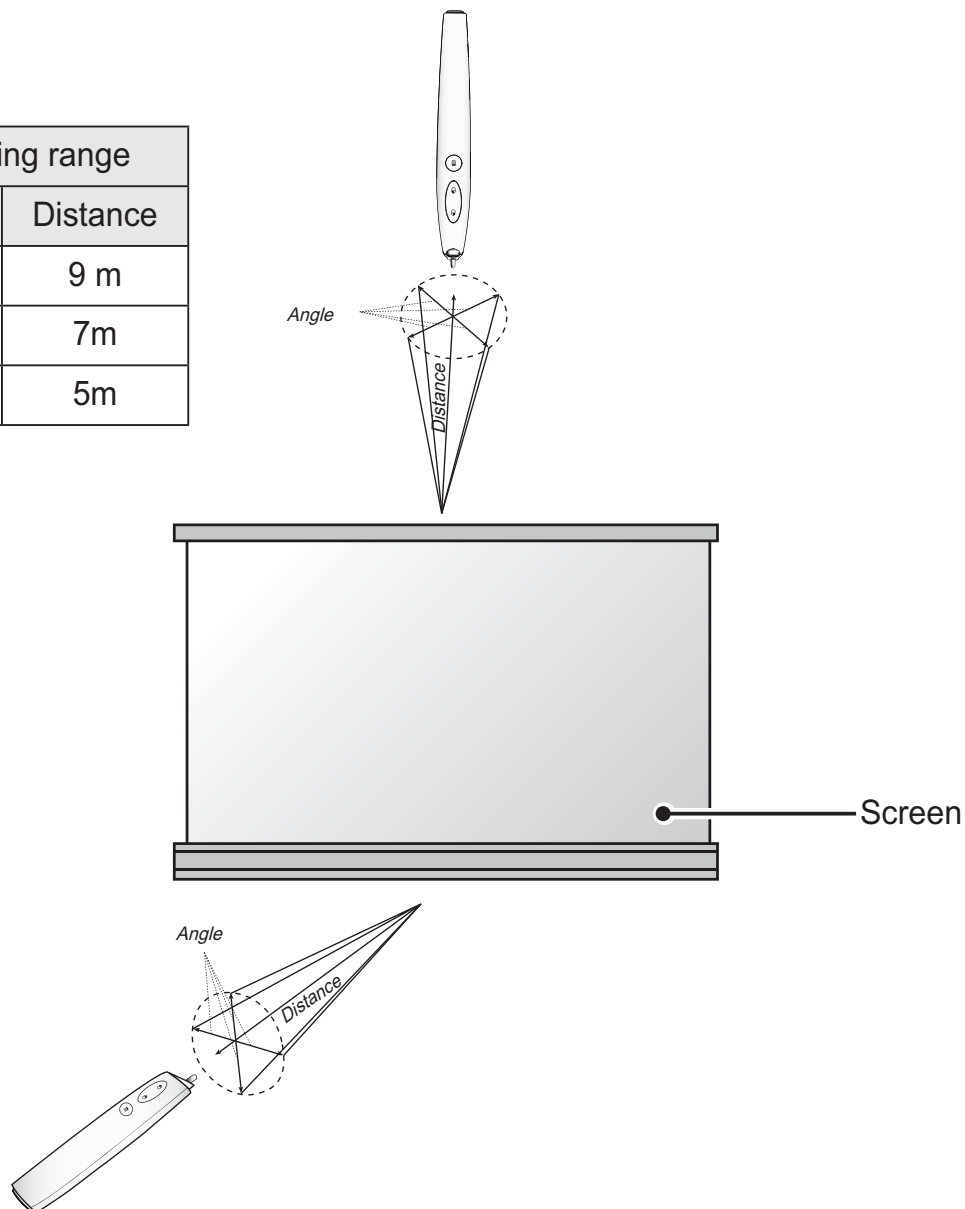
- Be sure to wear the strap on your wrist when using the interactive pen.
- Store the interactive pen in the hard case.

(For SA565 only)

Operating Range with Interactive Pen

- It is designed to work on the screen with the size of 762 mm - 2540 mm.
- You can use two Interactive pens at the same time.
- Actual operating range may slightly differ from the diagram.
- If the projector screen darkens due to the surrounding environment, the operating range of the interactive pen may be affected.

Operating range	
Angle	Distance
0 °	9 m
20 °	7m
45 °	5m



(For SA565 only)

To Use the Interactive Pen Functions

- Make sure that the Computer/Laptop screen is displayed on the projector screen.



- 1 Press the MENU button.
- 2 Select OPTION using the **Left** and **Right** buttons, and press the OK button.
- 3 Select Interactive using the **Left**, **Right**, and **Down** buttons, and press the OK button.
 - To return to the previous screen, press the **Left** button.
- 4 Select which item you want using the **Left**, **Right**, and **Down** buttons, and press the OK button.
 - After the settings have been changed, press the Close button to close the window.

The interactive function settings are as follows:

Item	Description
Interactive	<p>There are four function modes: Off/Single, Pen/Double, or Pen/Multi Touch.</p> <ul style="list-style-type: none"> • Off: Disables the interactive pen function. • Single Pen: Use one interactive pen. • Double Pen: Use two interactive pens at the same time. (It is recommended to install the WizTeach program provided on your PC prior to use.) • Multi Touch: Use various functions, such as zoom in, zoom out, or rotation, with two interactive pens. (Supported in Windows 7 only)
channel	<p>You can select a channel in Auto or Manual mode.</p> <ul style="list-style-type: none"> • Auto: A channel is automatically selected. • Manual: Select a channel manually.
Set Channel	A maximum of 29 channels (0 - 28) are available.
Pairing Mode	<p>Set the pairing mode to either Open or Fixed.</p> <ul style="list-style-type: none"> • Open mode: Follow the on-screen instructions to set the interactive pen to Open mode. (While the interactive pen is pointing at a screen, the pen can be used with any projector.) • Fixed mode: Follow the on-screen instructions to set the interactive pen to Fixed mode. (The interactive pen can be used only with a paired projector.) <ul style="list-style-type: none"> - Up to 10 pens can be paired to one projector.

(For SA565 only)

Troubleshooting the Interactive Pen Function

Problem	Troubleshooting
I can't use or connect the interactive pen.	<p>Check that the interactive pen function is turned on.</p> <p>Check that the interactive dongle is connected to the projector.</p> <p>Press the interactive pen's power button to check that the power is turned on.</p> <p>Check that the Interactive pen is paired.</p> <p>Make sure that the computer screen is displayed on the projector screen.</p>
The interactive pen does not work from time to time.	<p>Connect the interactive USB cable to another USB port and try to use the interactive pen again.</p>
The projector screen looks abnormal when the interactive pen function is enabled.	<p>Check that the projector and computer are connected properly.</p>
The interactive pen is showing in a different position.	<p>Make sure that the computer screen is displayed on the projector screen.</p>
The interactive pen does not work smoothly.	<p>Check whether the projector is too far away from the computer or if there are too many obstacles between them.</p> <p>Check whether too many applications are running on the PC.(It is not recommended to run other applications while running the interactive program (WizTeach software).)</p>
The LED is not working.	<p>Check whether the battery is flat.</p>
The red LED flashes on the pen once every second, indicating a battery issue.	<p>The battery is low.Charge the interactive pen.</p>

Serial Communication Function

Using Serial Communication

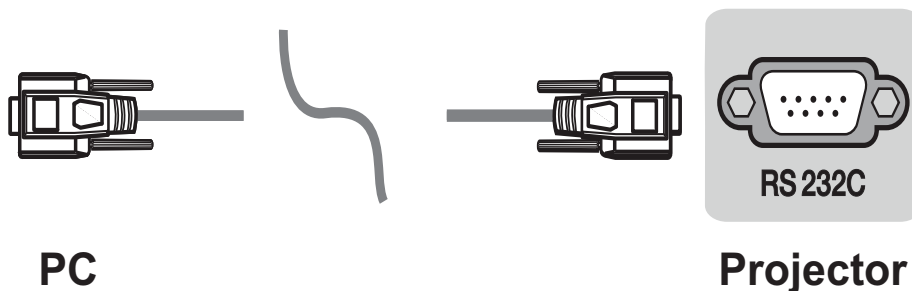
If the projector is connected to a PC through an RS-232C cable, you can use the PC to control functions of the projector such as power On/Off or input selection, etc.

It cannot be used with the Ez-Net Manager concurrently. For serial communication, use RJ45 Off in the Network Settings.

Establishing Serial Communication

Connect the RS-232C (serial connector) of the PC to the RS-232C connector at the back of the projector.

You need to purchase a cable to connect the RS-232C connectors as it is not provided as an accessory.



* A RS-232C cable is necessary for the remote control of the projector (see Figure 1).

[Figure 1] RS-232 Connection Diagram



* There is no connection to Pin 1 and Pin 9.

Communication Parameter Setup

- Baud Rate: 9600 bps(UART)
- Data Length: 8 bit
- Parity: none
- Stop bit: 1 bit
- Flow Control: none
- Communication code: ASCII code

Communication Protocol

1. Transmission

[Command1] [Command2] [] [Set ID] [] [Data] [Cr]

- * [Command1]: The first command to control the projector (k, j, x, ASCII code, 1 character)
- * [Command2]: The second command to control the projector (ASCII code, 1 character)
- * [Set ID]: Used to select the set to control; ID can be granted for each set listed in the Special Menu, which can be selected from the range '1 - 99 (0 x 01 - 0 x 63)'. If Set ID is set to '00', you can control all the sets. In the command line, a hexadecimal value is used as a Set ID.
- * [Data]: Used to send data needed for the commands mentioned above. If it is in ASCII code, 2 characters are sent.
- * If the data is 'FF', it means data read mode.
- * [Cr]: Carriage Return
It corresponds to ASCII code '0x0D'.
- * []: ASCII code character corresponding to "Space Bar" separating command, Set ID, and data.

2. OK Acknowledgement

[Command2] [] [Set ID] [] [OK] [Data] [x]

- * If a set receives the data successfully, it returns ACK in the above format. Here, the data will be the information from the projector indicating the current status of the projector if it is in data read mode. The projector itself will return the data from the PC if it is in data write mode.

3. Error Acknowledgement

[Command2] [] [Set ID] [] [NG] [Data] [x]

- * If a set receives an abnormal piece of data such as a non-supported function or there is a communication error, it returns ACK in the above format.
- Data [01] : illegal code
(This command is not supported.)
- [02]: not support function
(This function is not supported.)
- [03]: wait and retry
(Wait and try again after a while.)

Data Structure

10	16																		
0	00	10	16	10	16	10	16	10	16	10	16	10	16	10	16	10	16	10	16
1	01	11	0B	21	15	31	1F	41	29	51	33	61	3D	71	47	81	51	91	5B
2	02	12	0C	22	16	32	20	42	2A	52	34	62	3E	72	48	82	52	92	5C
3	03	13	0D	23	17	33	21	43	2B	53	35	63	3F	73	49	83	53	93	5D
4	04	14	0E	24	18	34	22	44	2C	54	36	64	40	74	4A	84	54	94	5E
5	05	15	0F	25	19	35	23	45	2D	55	37	65	41	75	4B	85	55	95	5F
6	06	16	10	26	1A	36	24	46	2E	56	38	66	42	76	4C	86	56	96	60
7	07	17	11	27	1B	37	25	47	2F	57	39	67	43	77	4D	87	57	97	61
8	08	18	12	28	1C	38	26	48	30	58	3A	68	44	78	4E	88	58	98	62
9	09	19	13	29	1D	39	27	49	31	59	3B	69	45	79	4F	89	59	99	63
10	0A	20	14	30	1E	40	28	50	32	60	3C	70	46	80	50	90	5A	100	64

Command Reference List

	Command 1	Command 2	Data
01. Power	k	a	00 - 01
02. Aspect Ratio	k	c	*
03. Blank Image	k	d	00 - 01
04. Contrast	k	g	00 - 64
05. Brightness	k	h	00 - 64
06. Color	k	i	00 - 64
07. Tint	k	j	00 - 64
08. Sharpness	k	k	00 - 32
09. OSD Select	k	l	00 - 01
10. Key Lock	k	m	00 - 01
11. Color Temperature	k	u	00 - 04 (excluding 03)
12. Black Level	n	m	00 - 01
13. Energy Saving	n	p	00 - 02
14. Auto Config.	j	u	01
15. Input	x	b	*
16. Key	m	c	*
17. Picture Mode	n	s	00 - 08(excluding 02, 04)
18. Mute	k	e	00 - 01
19. Volume	k	f	00 - 64
20. Monitor Out	n	r	00 - 02

- For more information about the data(*), refer to next page.

01. Power (Command: ka)

⇒ Powers the set on/off.

When Magical Mirroring or Wi-Fi Screen Share is running, only the Power function is available to use.

Transmission

```
[k][a][Set ID][Data][Cr]
```

Data 00: Power Off
01: Power On

Ack

```
[a][Set ID][OK][Data][x]
```

Data 00: Power Off
01: Power On

⇒ Shows the power on/off status.

Transmission

```
[k][a][Set ID][FF][Cr]
```

Ack

```
[a][Set ID][OK][Data][x]
```

Data 00: Power Off
01: Power On

* As with other functions, if data is transmitted as '0xFF' in the above format, the current status of each function is returned as a feedback in Ack data.

02. Screen size (Command: kc)

⇒ Adjusts the screen size.

Transmission

```
[k][c][Set ID][Data][Cr]
```

Data 01 : Normal Screen (4:3)
02: Wide Screen (16:9)
04: Zoom
06: Set By Program
08: Full
09: Just Scan
10 - 1f: Cinema Zoom 1 - 16

Ack

```
[c][Set ID][OK][Data][x]
```

Data 01 : Normal Screen (4:3)
02: Wide Screen (16:9)
04: Zoom
06: Set By Program
08: Full
09: Just Scan
10 - 1f: Cinema Zoom 1 - 16

03. Blank Image (Command: kd)

⇒ Enables/disables the blank image.

Transmission

```
[k][d][Set ID][Data][Cr]
```

Data 00: Screen Mute Off (picture on)
01: Screen Mute On (picture off)

Ack

```
[d][Set ID][OK][Data][x]
```

Data 00: Screen Mute Off (picture on)
01: Screen Mute On (picture off)

04. Contrast (Command: kg)

⇒ Adjusts the contrast.

Disabled when the Black Mode is selected.

Transmission

```
[k][g][ ][Set ID][ ][Data][Cr]
```

Data Min : 0H - Max : 64H

(* Transmitted in hexadecimal code)

* See the data structure.

Ack

```
[g][ ][Set ID][ ][OK][Data][x]
```

Data Min : 0H - Max : 64H

06. Color (Command: ki)

⇒ Adjusts the color.

Disabled when the Black mode is selected.

Transmission

```
[k][i][ ][Set ID][ ][Data][Cr]
```

Data Min : 0H - Max : 64H

(* Transmitted in hexadecimal code)

* See the data structure.

Ack

```
[i][ ][Set ID][ ][OK][Data][x]
```

Data Min : 0H - Max : 64H

05. Brightness (Command: kh)

⇒ Adjusts the brightness.

Disabled when the Black mode is selected.

Transmission

```
[k][h][ ][Set ID][ ][Data][Cr]
```

Data Min : 0H - Max : 64H

(* Transmitted in hexadecimal code)

* See the data structure.

Ack

```
[h][ ][Set ID][ ][OK][Data][x]
```

Data Min : 0H - Max : 64H

07. Tint (Command: kj)

⇒ Adjusts the tint.

Disabled when the Black mode is selected.

Transmission

```
[k][j][ ][Set ID][ ][Data][Cr]
```

Data Red : 0H - Green : 64H

(* Transmitted in hexadecimal code)

* See the data structure.

Ack

```
[j][ ][Set ID][ ][OK][Data][x]
```

Data Red : 0H - Green : 64H

08. Sharpness (Command: kk)

⇒ Adjusts the sharpness.

Disabled when the Black mode is selected.

Transmission

```
[k][k][Set ID][Data][Cr]
```

Data Min : 0H - Max : 32H

(* Transmitted in hexadecimal code)

* See the data structure.

Ack

```
[k][Set ID][OK][Data][x]
```

Data Min : 0H - Max : 32H

10. Key Lock (Command: km)

⇒ Enables the lock function for the remote control and local keypad.

Transmission

```
[k][m][Set ID][Data][Cr]
```

Data	00	: Lock Off
	01	: Lock On

Ack

```
[m][Set ID][OK][Data][x]
```

Data	00	: Lock Off
	01	: Lock On

* This function is used when the remote control is not being used. If remote control lock is on, none of the buttons of the local keypad and remote control will work.

09. OSD Select (Command: kl)

⇒ Selects OSD On/Off.

Transmission

```
[k][l][Set ID][Data][Cr]
```

Data	00: OSD Select Mode Off
	01: OSD Selection Mode On

Ack

```
[l][Set ID][OK][Data][x]
```

Data	00: OSD Select Mode Off
	01: OSD Selection Mode On

11. Color Temperature (Command: ku)

⇒ Adjusts the color temperature.

Disabled when the Black mode is selected.

Transmission

```
[k][u][Set ID][Data][Cr]
```

Data	00: Medium	01: Cool
	02: Warm	04: Natural

(* Transmitted in hexadecimal code)

*Data 03 is not used.

Ack

```
[u][Set ID][OK][Data][x]
```

Data	00: Medium	01: Cool
	02: Warm	04: Natural

12. Black Level (Command: nm)

⇒ Adjusts the black level.
Disabled when the Black mode is selected.

Transmission

```
[n][m][Set ID][Data][Cr]
```

Data 00: Low 01: High
(* Transmitted in hexadecimal code)

Ack

```
[m][Set ID][OK][Data][x]
```

Data 00: Low 01: High

14. Auto Configure (Command: ju)

⇒ Adjusts the video position in RGB mode and minimizes image shaking.

Transmission

```
[j][u][Set ID][Data][Cr]
```

Data 01 : To set
(* Transmitted in hexadecimal code)

Ack

```
[u][Set ID][OK][Data][x]
```

Data 01 : To set

13. Energy Saving (Command: np)

⇒ Sets the energy saving mode.

Transmission

```
[n][p][Set ID][Data][Cr]
```

Data 00: Minimum
Data 01: Medium
Data 02: Maximum
(* Transmitted in hexadecimal code)

Ack

```
[p][Set ID][OK][Data][x]
```

Data 00: Minimum
Data 01: Medium
Data 02: Maximum

15. Input Select (Command: xb)

⇒ Select the input signal of the set.

Transmission

```
[x][b][Set ID][Data][Cr]
```

Data 20: AV 40: Component
60 : RGB 1 61 : RGB 2
90 : HDMI
(* Transmitted in hexadecimal code)

Ack

```
[b][Set ID][OK][Data][x]
```

Data 20: AV 40: Component
60 : RGB 1 61 : RGB 2
90 : HDMI A0: HDMI-PC

16. Key (Command: mc)

⇒ Sends a key code of the IR remote control.

Transmission

[m][c][Set ID][Data][Cr]

Data Key Code: see page 86 .
(* Transmitted in hexadecimal code)

Ack

[c][Set ID][OK][Data][x]

Data Key Code

17. Picture Mode (Command: ns)

⇒ Sets the picture mode.

Transmission

[n][s][Set ID][Data][Cr]

Data 00 : Vivid	01 : Standard
03 : Cinema	05 : Game
06 : Black Mode	07 : Expert 1
08 : Expert 2	

(* Transmitted in hexadecimal code)

Ack

[s][Set ID][OK][Data][x]

Data 00 : Vivid	01 : Standard
03 : Cinema	05 : Game
06 : Black Mode	07 : Expert 1
08 : Expert 2	

(* Transmitted in hexadecimal code)

18. Mute (Command: ke)

⇒ Enables/disables the mute function.

Transmission

[k][e][Set ID][Data][Cr]

Data 00 : Mute On (Volume Off)
01 : Mute Off (Volume On)

Ack

[e][Set ID][OK][Data][x]

Data 00 : Mute On (Volume Off)
01 : Mute Off (Volume On)

19. Volume (Command: kf)

⇒ Adjusts the volume.

Transmission

[k][f][Set ID][Data][Cr]

Data Min : 0H - Max : 64H
(* Transmitted in hexadecimal code)
* See the data structure.

Ack

[f][Set ID][OK][Data][x]

Data Vol 00 : 0H - Vol 100 : 64H

20. Monitor Out (Command: nr)

⇒ Select either RGB1 or 2 input as Monitor Out.

Transmission

[n][r][Set ID][Data][Cr]

Data 00 : RGB 1	01 : RGB 2
02: Auto	

Ack

[r][Set ID][OK][Data][x]

Data 00 : RGB 1	01 : RGB 2
02: Auto	

<Key Code>

Key Name	Key Code	Key Name	Key Code
^	0x40	Blue	0x61
v	0x41	KEY.S ▲	0xA4
>	0x06	KEY.S ▼	0xA5
<	0x07	Mic	0xE4
POWER	0xAD	USB	0x7C
IINPUT	0xEF	MUTE	0x09
MENU	0x43	PAGE ^	0x00
↶ (BACK)	0x28	PAGE v	0x01
OK	0x44	HELP	0x81
ENERGY SAVING	0x95	STILL	0xBC
RATIO	0x79	EXIT ↵	0x5B
BLANK	0x84	0	0x10
PICTURE	0x4D	1	0x11
AUTO	0x92	2	0x12
Q.MENU	0x45	3	0x13
SLEEP	0x0E	4	0x14
AV MODE	0x30	5	0x15
VOL +	0x02	6	0x16
VOL -	0x03	7	0x17
Red	0x72	8	0x18
Green	0x71	9	0x19
Yellow	0x63		

MAINTENANCE

Clean your projector to keep it in optimal condition.

Cleaning

Cleaning the Lens

If there is any dust or staining on the lens surface, you must clean the lens. Use an air spray or a cleaning cloth to clean the lens.

To remove dust or stains, use an air spray or apply a small amount of cleaning agent onto a swab or soft cloth to lightly rub the lens.

Please be aware that liquid may flow into the lens if the product is sprayed directly onto the lens.

Cleaning the projector case

To clean the projector case, first unplug the power cord.

To remove dust or stains, use only a dry, lint-free, nonabrasive cloth to polish the lens.

Do not use alcohol, benzene, thinners or other chemicals, which may damage the case.

Updating Software

When software update is required, run the software update to obtain the latest software version.

You can manually check for and download any software updates.

- 1 Press the **MENU** button.
- 2 Select **SUPPORT** and go to **Software Update**.

Item	Description
Software Update	Enable this option. When an update file is found, it is downloaded automatically. When the update file is finished downloading, a software update window appears.
Check Update Version	If an update file of a higher version exists after checking the latest update version, you can proceed with the update manually.

- The update service to get the latest version is provided through an Internet connection.
- If the software is not updated, some functions may not work well.

Wireless Specifications

Wireless LAN module(WN8122E) specification

Standard	IEEE802.11a/b/g/n
Frequency Range	2400 to 2483.5 MHz 5150 to 5250 MHz 5725 to 5850 MHz
Modulation	CCK / OFDM / MIMO
Output Power (Typical)	802.11a: 14 dBm 802.11b: 17 dBm 802.11g: 15 dBm 802.11n - 2.4GHz: 13.5 dBm 802.11n - 5GHz: 12 dBm
Data Rate	802.11a/g: 54 Mbps 802.11b: 11 Mbps 802.11n: 300 Mbps
Antenna Gain (Typical)	2400 to 2483.5 MHz: -0.79 dBi 5150 to 5250 MHz: 0.62 dBi 5725 to 5850 MHz: 0.52 dBi
Occupied bandwidth	802.11a/b/g: HT20 802.11n: HT20/40

- Because band channel used by the country could be different, the user can not change or adjust the operating frequency and this product is set for the regional frequency table.

CE 0168 

Wireless Specifications of the Interactive Dongle/Pen

(For SA565 only)

- The interactive pen communicates with the interactive a projector's interactive dongle.

Frequency Range	2400 MHz - 2483.5 MHz
Modulation	MSK
Transmission power	0 dBm
Receive sensitivity	-82 dBm
Data Rate	500 kbps

SPECIFICATIONS

Model	SA560 (SA560-JP) / SA565(SA565-JP)	
Resolution (Pixel)	1280 (Horizontal) × 800 (Vertical)	
Aspect ratio	16:10 (Horizontal:Vertical)	
Panel size (mm)	16.51	
Projection distance (Video size)	0.452 m - 0.711 m (177.8 cm - 279.4 cm)	
Ratio of upward projection	128%	
Working range of the remote control	6 m	
Audio output	7 W + 7 W	
Reception type	NTSC, PAL-B, D, G, H, I, PAL M, PAL N, PAL 60, SECAM	
Height (mm)	147.5 (without foot), 162 (with foot)	
Width (mm)	468.0	
Depth (mm)	415.0	
Weight (kg)	8.5	
Headphone, ear- phone	Impedance: 16 Ω / Output power: 10 mW / Jack thickness: 3.5 mm	
USB Device	5 V, 0.5 A (Max.)	
POWER	AC 100 V ~ 240 V, 50 Hz/ 60 Hz	
Operation environ- ment	Temperature	
	Operation	0 °C to 40 °C
	Storage	-20 °C to 60 °C
	Relative humidity	
	Operation	0 % - 80 %
	Storage	0 % - 85 %

Supported Monitor Display

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720*400	31.469	70.08
640*480	31.469	59.94
800*600	37.879	60.31
1024*768	48.363	60.00
1152*864	54.348	60.053
1280*800	49.68	60
1280*1024	63.981	60.020
1400*1050	65.317	59.979
1680*1050	65.3	60

- If an invalid signal is input into the projector, it will not be displayed properly on the screen or a message such as “No Signal” or “Invalid Mode” will be displayed.
- The projector supports the DDC1/2B type as the Plug & Play function (Auto-recognition of PC monitor).
- PC sync signals supported: Separate Sync.
- In PC mode, 1280x800 is recommended for the best picture quality.
- The 1400x1050 resolution may not be supported depending on the PC type.

Component Port Connection

Signal	Component
480i / 576i	○
480p / 576p	○
720p / 1080i	○
1080p	○

HDMI/DVI-DTV/WiDi mode supported

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
480p	31.47	60
	31.47	59.94
	31.5	60
576p	31.25	50
720P	37.5	50
	44.96	59.94
	45	60
1080i	28.125	50
	33.75	60
1080p	56.25	50
	67.432	59.94
	67.5	60
	67.432	59.939
	27	24
	26.97	23.976
	33.75	30
	33.71	29.97

Open Source Software Information

To obtain the source code under the GPL, LGPL, MPL and other open source licenses, which is contained in this product, please visit

<http://opensource.lge.com>.

In addition to the source code, all referenced license terms, warranty disclaimers and copyright notices are available for download.

If you send an email to opensource@lge.com to request the software's open source code installed on the projector within three years of purchase, we will send you a CD-ROM. You will only be charged a minimum for packaging and delivery.

) Federal Communications Commission(FCC) Statement

You are cautioned that changes or modifications not expressly approved by the part responsible

for compliance could void the user's authority to operate the equipment.

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:

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

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference, and
- 2) this device must accept any interference received, including interference that may cause undesired operation of the device.

Indoor use only

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Caution: Exposure to Radio Frequency Radiation.

1. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.



The model and serial number of the projector are located on the back or on the side of the projector. Record them below should you ever need service.

MODEL _____

SERIAL _____