

LASER BEAM PRO

(CLASS 1 LASER PRODUCT)

IEC 60825-1 Edition 3: 2014

User Guide

2017/08 Rev 1.8

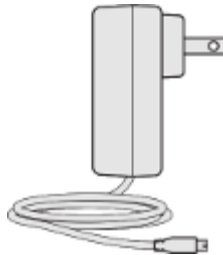
www.cremotech.co.kr

Getting Started

Supplied Items



Beam Projector



Power Adapter

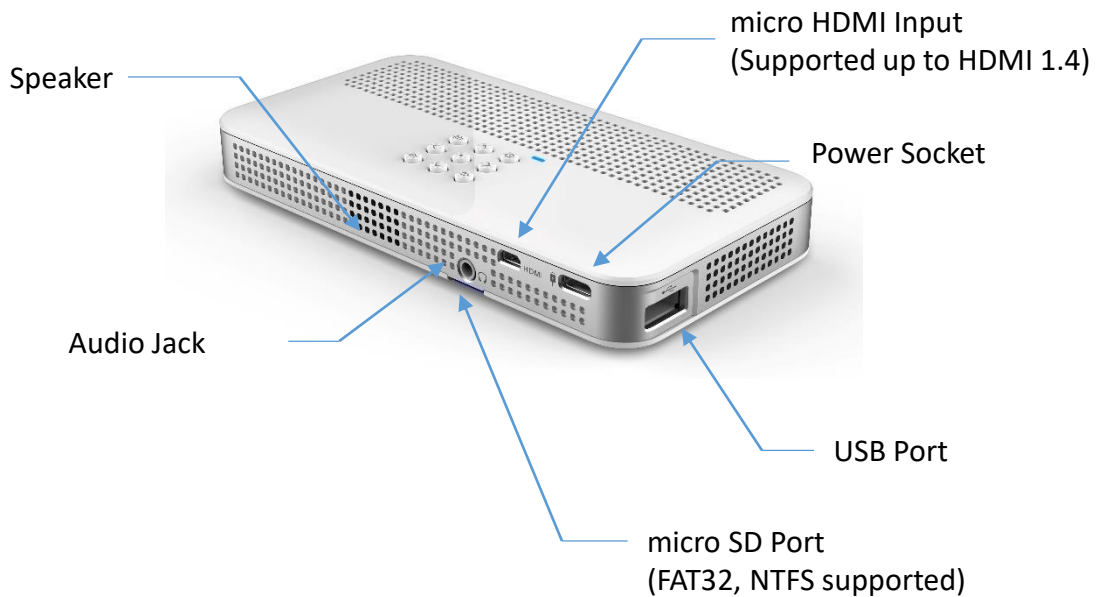
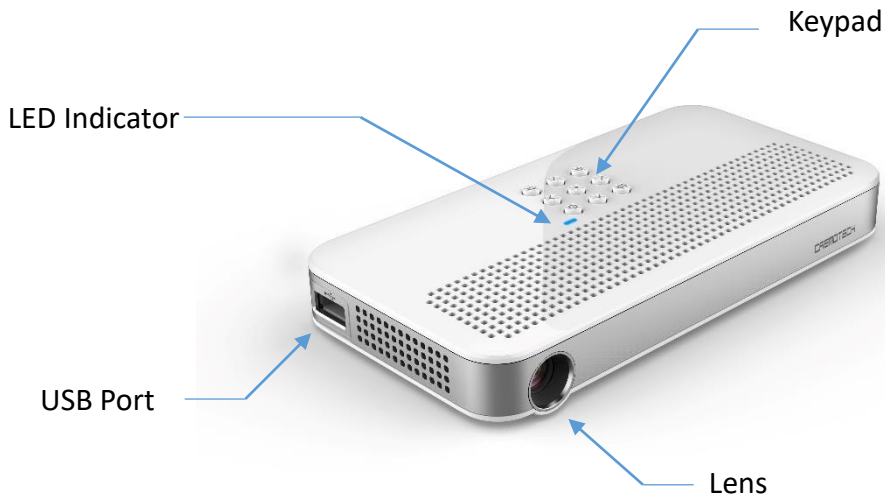
[Caution] Be sure to use a dedicated charger.
Chargers with different specifications may not
be fully charged or may cause malfunction.



Basic Manual

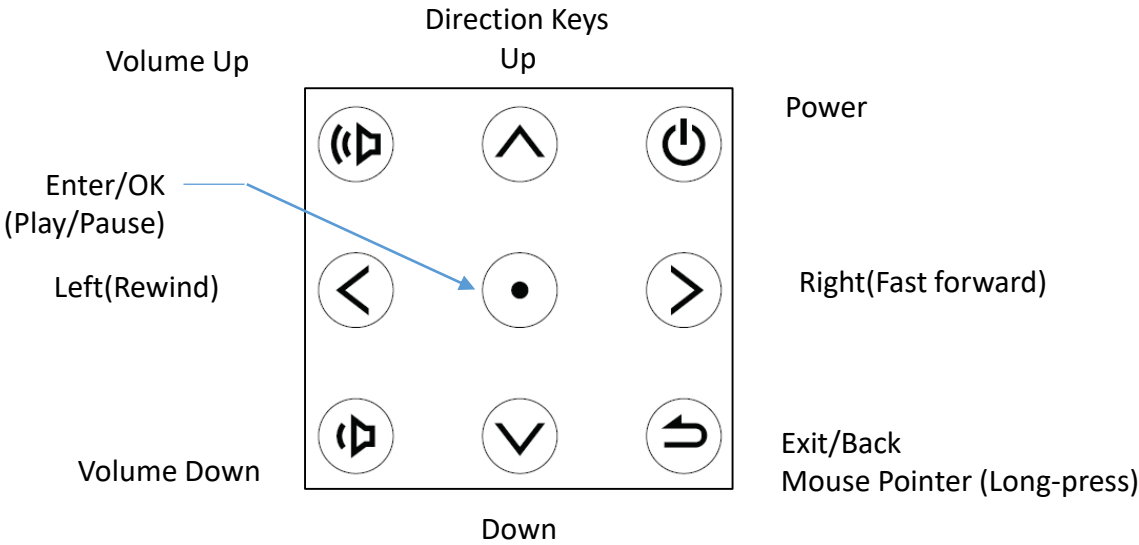
Getting Started





Parts and Controls



Getting Started

Keypad Functions



Power On	Turn the projector on by pressing and holding the Power Key for four seconds until the LED indicator displays yellow.
Power Off	Press and hold the Power Key until the 'Power Off' alert is shown on the screen.
Sleep Mode 	Short-press the Power Key to switch to power-saving mode. Short-press power the Power Key again to exit power-saving mode.
Mouse 	Long-press the Back Key to switch to mouse mode. Use direction keys to move the mouse pointer. Long-press the Back Key again to exit mouse mode.
Exit/Back 	Press the Back Key to return to the previous screen or to exit.
Directional Keys 	Use the four Direction Keys to move between menus. These keys are used to move the mouse pointer in mouse mode.
Media Player	In video playback, the Left Key is used to rewind, the Right Key is used to fast forward, and the OK Key is used for Play/Pause.

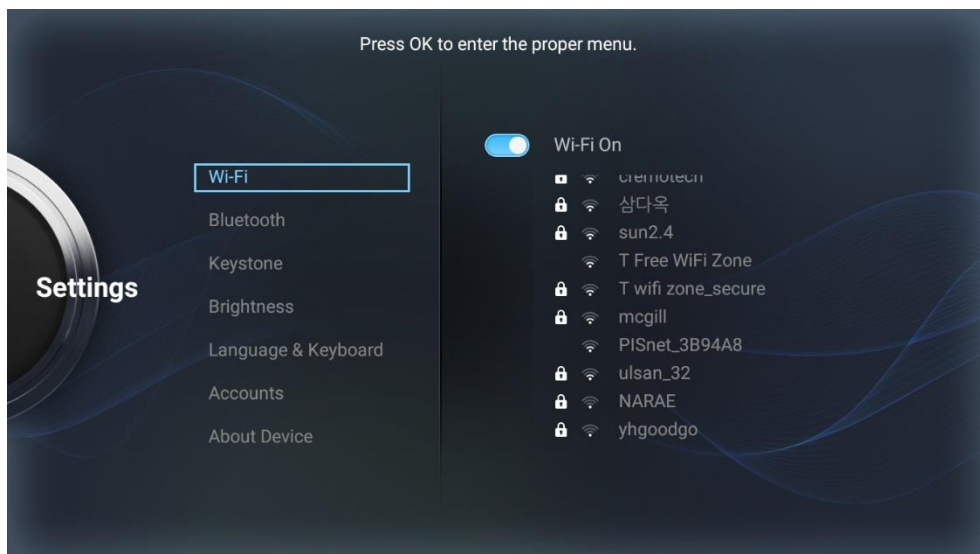
Getting Started

Connecting to the Internet

Please connect the projector to a Wi-Fi (AP : Access Point) to connect to the Internet.



Select Settings.



Select Wi-Fi to connect to an AP.







Long press the OK button or the left mouse button on the registered Wi-Fi will erase network.

Getting Started

Media Player



Select Apps > Media Player.

Media Player			
	The Walking Dead.mkv 0:52:2	/mnt/external_sd/The Walking Dead/The Walking Dead.mkv	2190.1 M
	Long Riders.mp4 0:23:59	/mnt/external_sd/Long Riders/Long Riders.mp4	350.0 M
	One Piece.mp4 0:23:59	/mnt/external_sd/One Piece/One Piece.mp4	484.2 M
	The Big Bang Theory.mkv 0:20:26	/mnt/external_sd/The Big Bang Theory/The Big Bang Theory.mkv	1218.9 M
	The Mick.mp4 0:22:10	/mnt/external_sd/The Mick/The Mick.mp4	182.1 M
	Detective Conan.mp4 0:24:24	/mnt/external_sd/Detective Conan/Detective Conan.mp4	307.2 M

You can play video files stored in the internal storage (Internal Memory), USB Memory, or micro SD card).

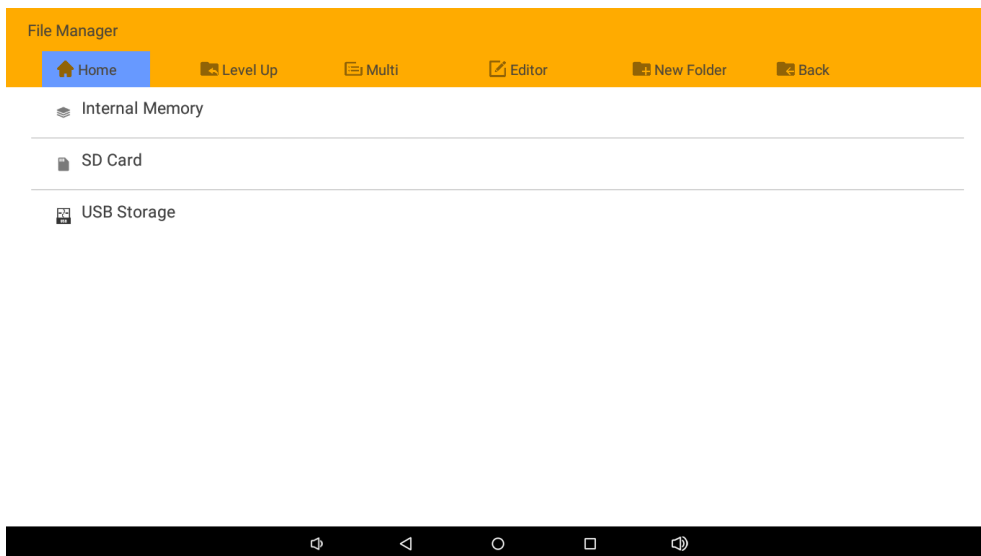
[Caution] Video with AC3 audio codec is not sounded due to copyright problem. If you convert the audio codec of the video to AAC and play it, the sound will play.

Getting Started

Using File Manager (1/4)



Select File Manager.



※ It is displayed in List only when Micro SD card or USB memory is recognized.

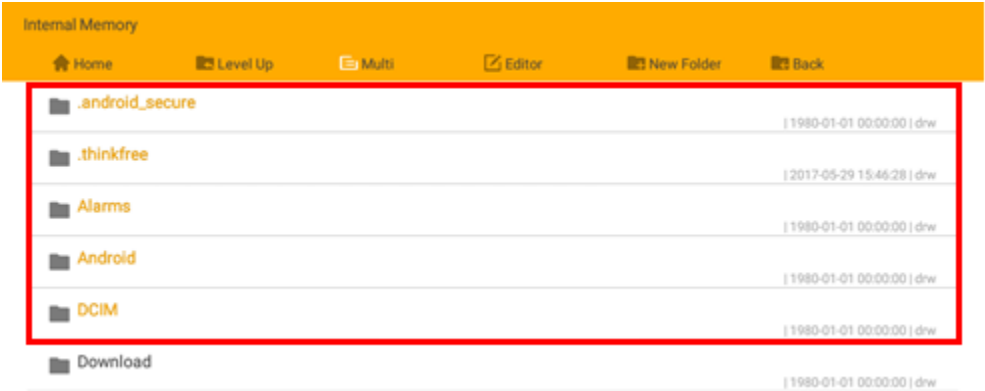
You can manage the files stored in the projector's internal storage device (represented by Internal Memory), USB memory, and micro SD card.

Getting Started

Using File Manager (2/4)



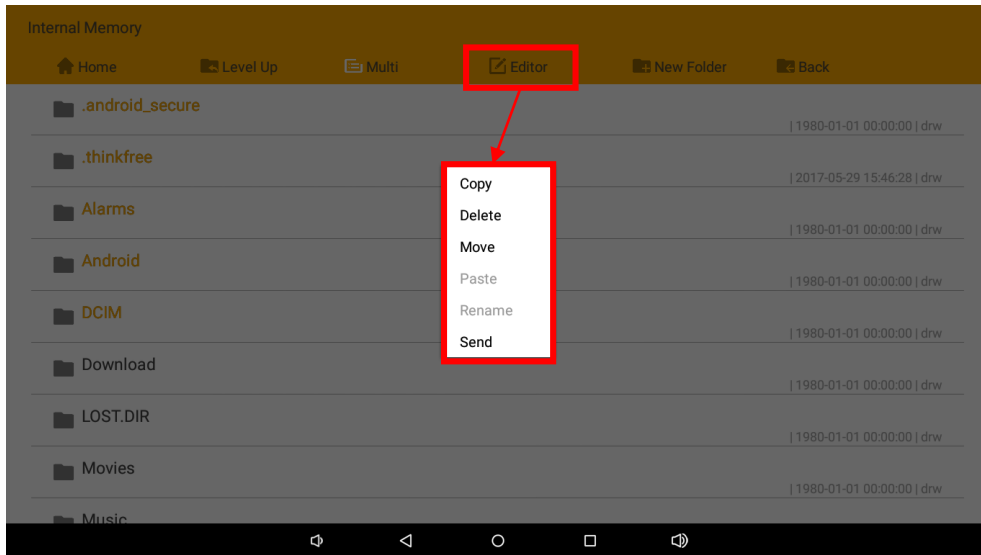
- ① **Home:** There are Internal Memory, SD card, USB storage on Home screen.
- ② **Level Up:** button to go up one level folder
- ③ **Multi:** Button to select multiple folders or files
- ④ **Editor:** Copy, Delete, Move, Paste, Rename, Send Function buttons (Long Press the OK button or the left mouse button on a file or folder to display the Editor screen.)
- ⑤ **New Folder:** button to create a new folder
- ⑥ **Back:** Button to return to the previous step



Folders or files selected as Multi as shown in the figure are displayed in yellow.

Getting Started

Using File Manager (3/4)



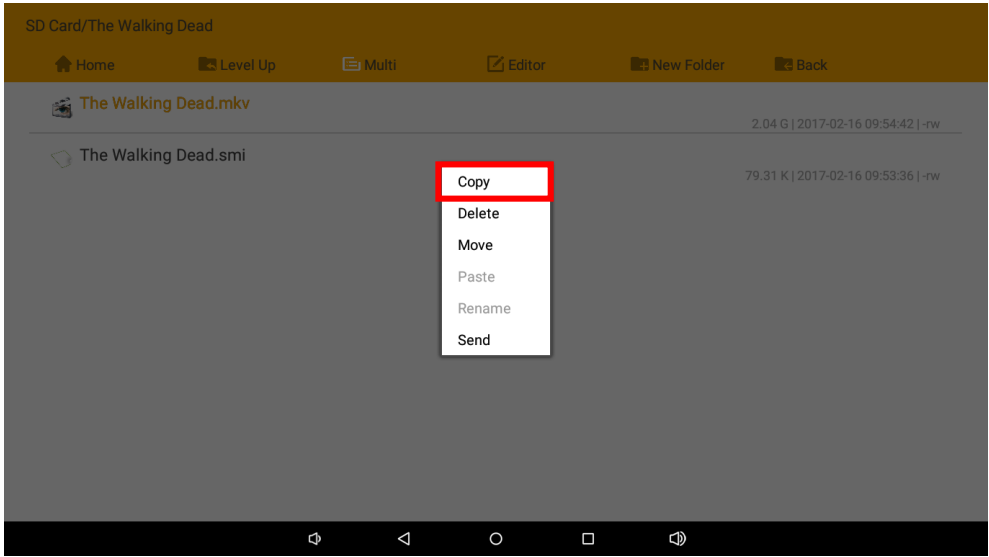
※ When you select Editor, window of red box appears when you press and hold file or folder with mouse.

- ① **Copy** : You can copy a folder or file.
- ② **Delete** : You can delete the folder or file.
- ③ **Move** : You can move folders or files.
- ④ **Paste** : You can paste a folder or file.
- ⑤ **Rename** : You can rename the folder or file.
- ⑥ **Send** : You can transfer a folder or file to another device using Bluetooth.

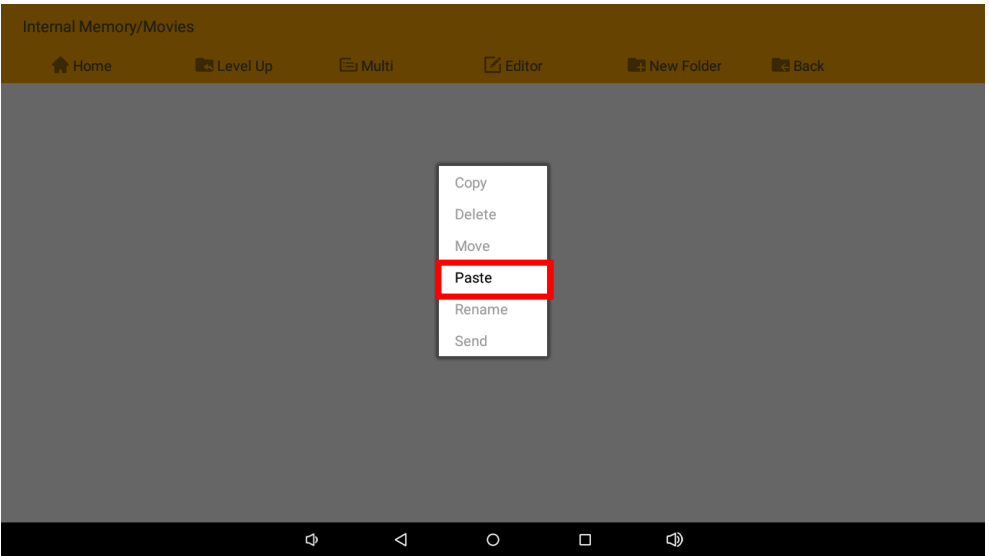
Getting Started

Using File Manager (4/4)

Copying a File to the Projector



Long press or Multi on a file and select Editor> Copy.
(Multi-file copying and pasting function can select multiple files only when Multi is selected.)



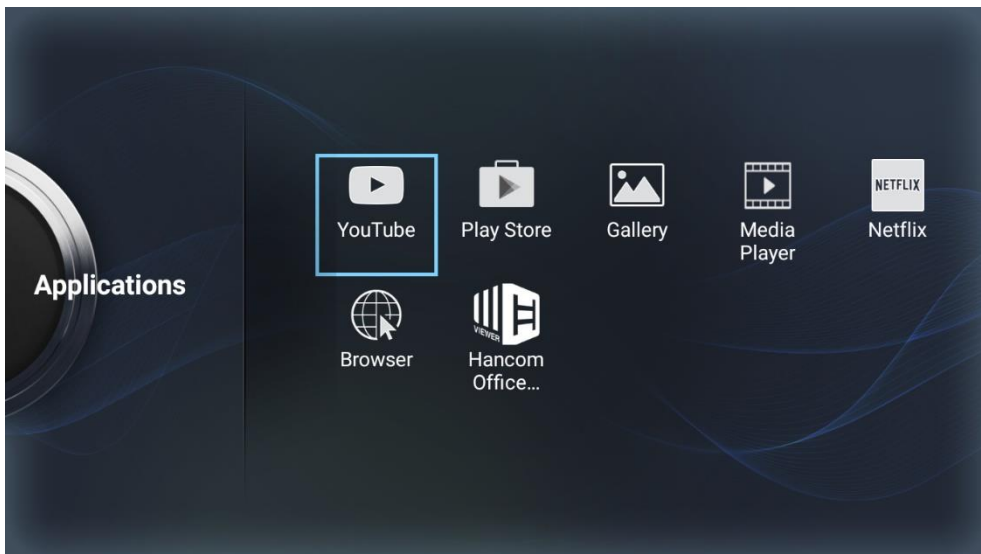
You can save the file to the projector by selecting the desired path in the projector's internal storage (shown as Internal Memory) and selecting Editor > Paste.

Getting Started

Using Applications



You can download apps from Google Play™.



You can use pre-installed apps – YouTube, Netflix, etc. – as well as apps you have downloaded.

You can delete the app by touching and holding the selected app and clicking the OK button in the pop-up window.

※ The Default App can not be deleted.

When using the app, it is convenient to use it by connecting the mouse as much as possible.

Getting Started

Using Navigation bar

[Caution] Must be connected by mouse.

You can use various buttons conveniently. (It will run automatically in downloaded apps.)



In the bottom part, drag the mouse up to move it up, and the navigation bar will appear as shown below.



Volume Down Back button Home button Recently used list button Volume Up

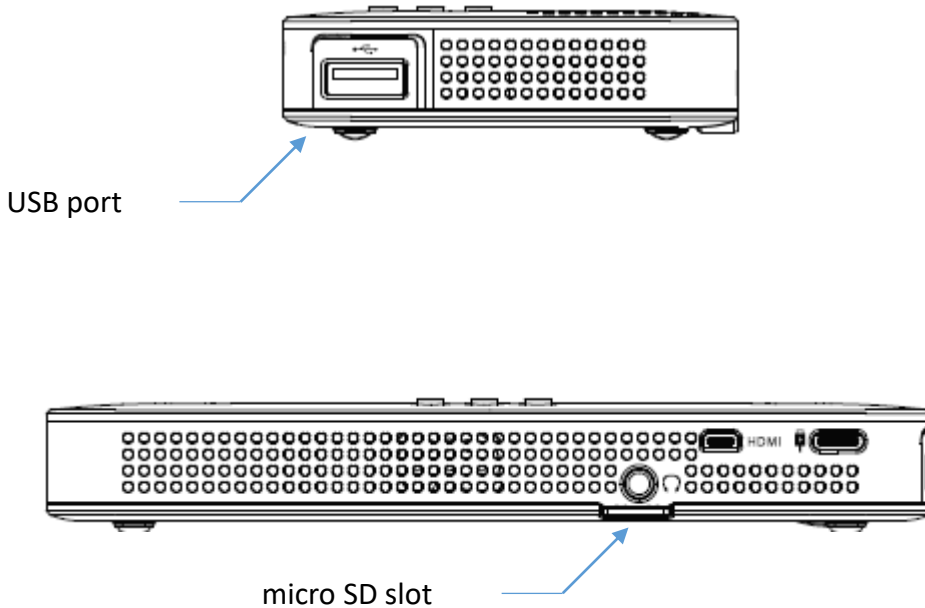
Getting Started

Using USB and Micro SD Cards

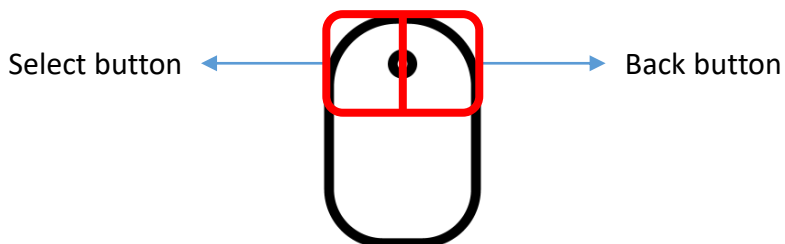
You can connect USB memory and USB mouse to the USB port.

Micro SD card (up to 128GB) can be used through the micro SD card slot.

※ USB mouse, USB memory, and micro SD card are not included.



Using Mouse



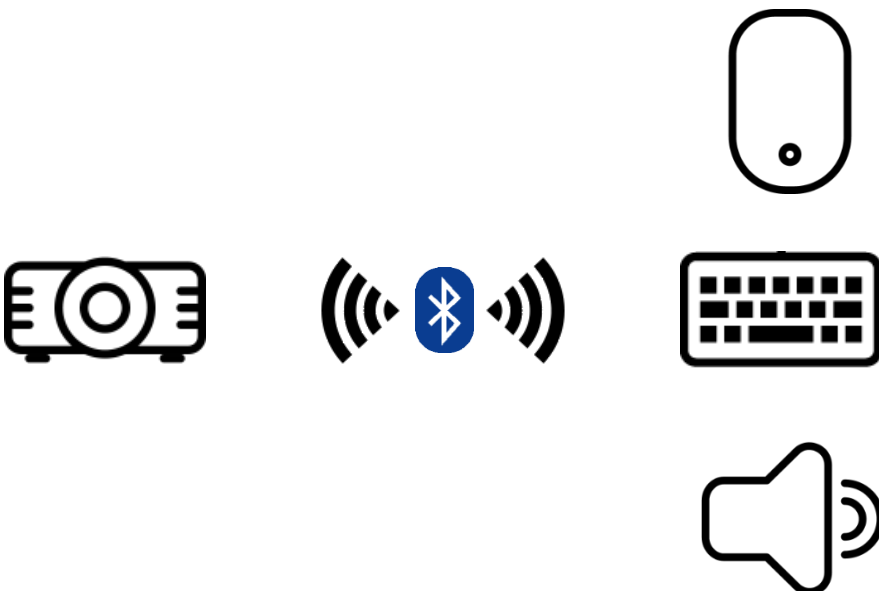
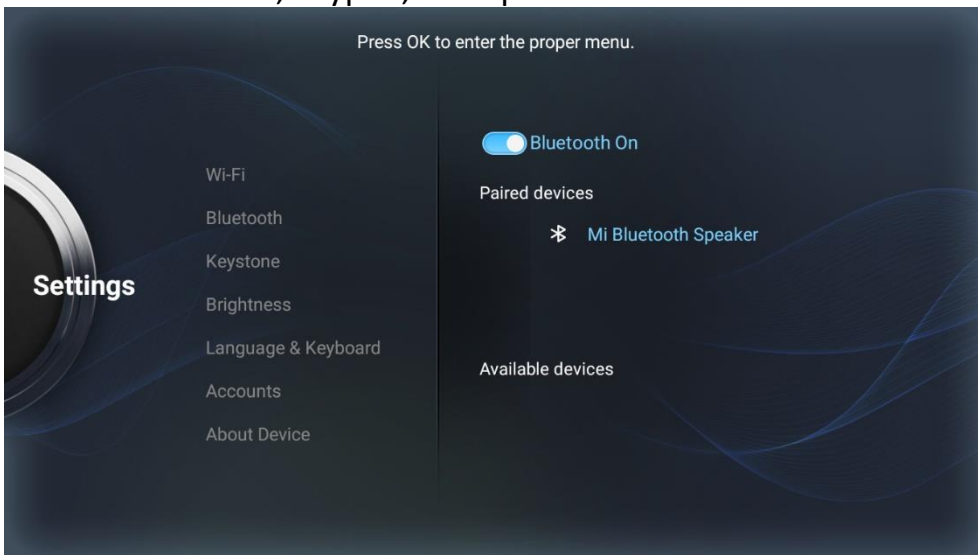
Getting Started

Using Bluetooth

You can connect Bluetooth devices such as mice, keypads, speakers to the projector.

In Settings > Bluetooth, you can select the Bluetooth device you want to connect.

※ Bluetooth mouse, keypad, and speaker are not included.



Connecting to Another Device

Connecting to an iOS device (1/3)

You can mirror your iOS device's screen with the projector.



Select iOS Mirroring.



Connecting to Another Device

Connecting to an iOS device (2/3)

AP Mode

The iOS device needs to be connected to the same Wi-Fi network.

Hotspot Mode

You can directly connect your iOS device to the projector via Hotspot mode.

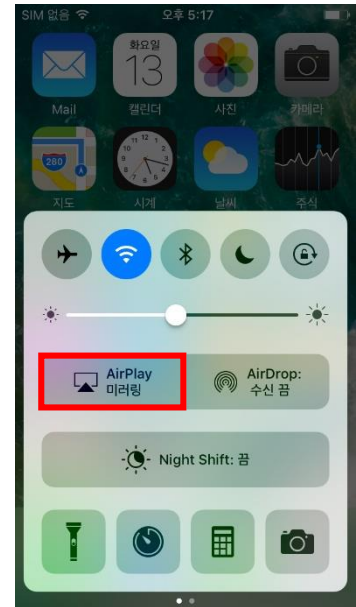


On your iOS device, run AirPlay and select the projector name to mirror your screen to the projector.

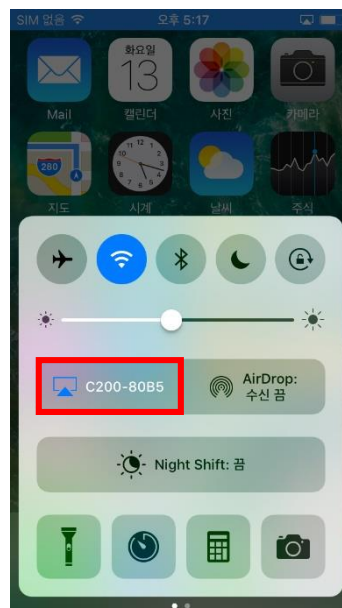
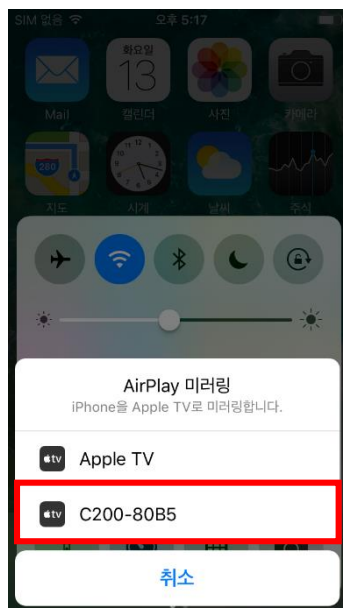
[Note] YouTube iOS App is not supported. Please use Safari on your iOS device and access <http://m.youtube.com> to mirror the screen. Some video apps like Netflix does not support screen mirroring.

Connecting to Another Device

Connecting to an iOS device (3/3)



1. Hotspot mode: Select the projector name to connect
Wi-Fi mode: Connect to a same Wi-Fi projector
2. You can use the Airplay mirroring menu by dragging the bottom of the iOS device screen up and lifting it.



3. Verify the name of the projector in Airplay Mirroring and connect it to start mirroring.

Connecting to Another Device

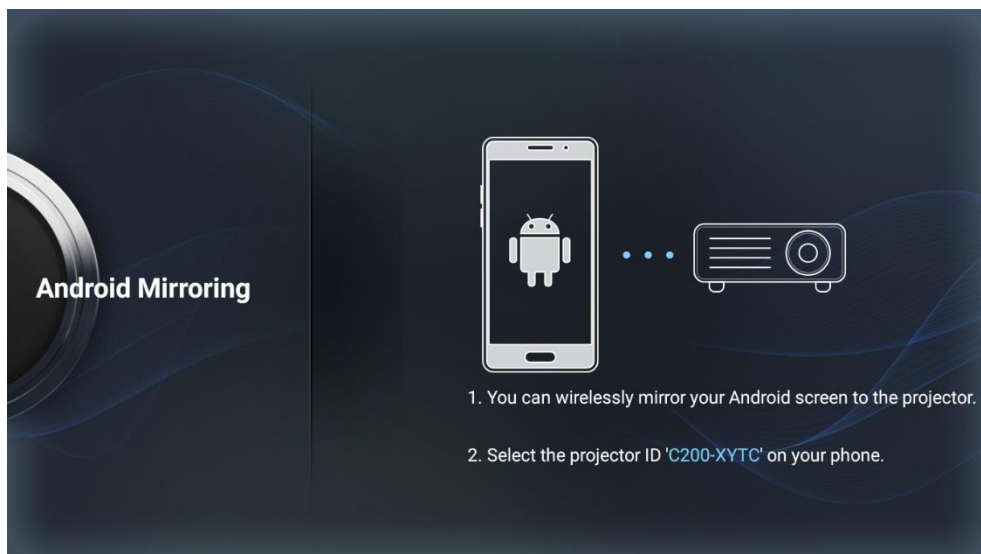
Connecting to an Android device (1/2)

You can mirror your Android device's screen to the projector.

Your Android device needs to support Miracast.



Select Android Mirroring.



Select Miracast menu on your Android device, and connect to the projector device name.

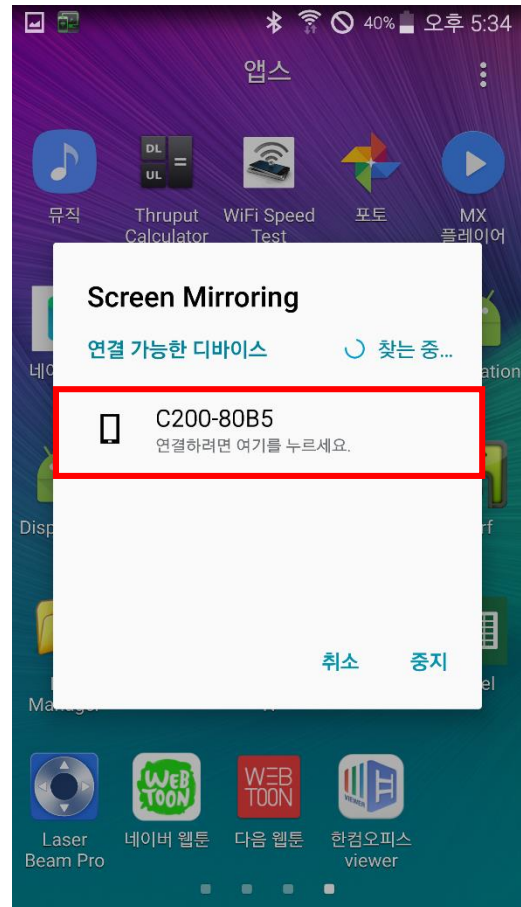
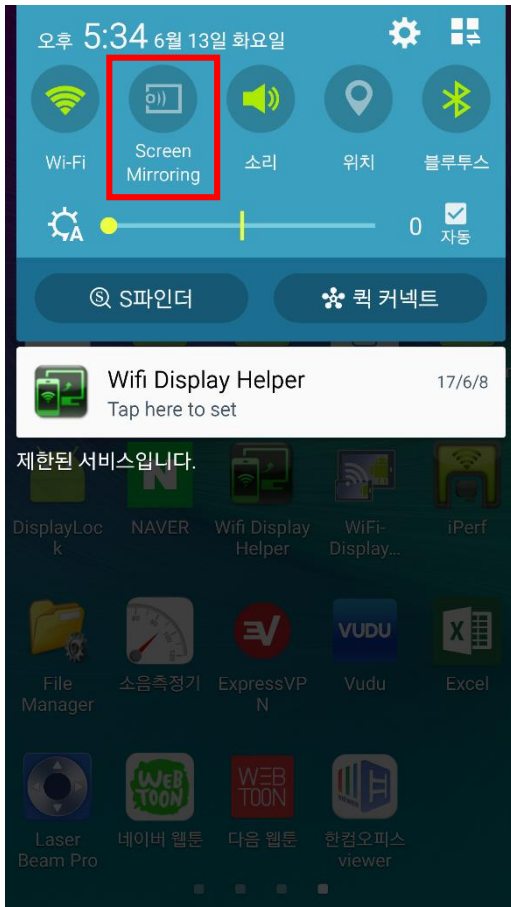
Connecting to Another Device

Connecting to an Android device (2/2)

※ Android Mirroring Name by manufacturer

- Samsung : Smart View, Screen Mirroring

- LG : Miracast, Screen Sharing

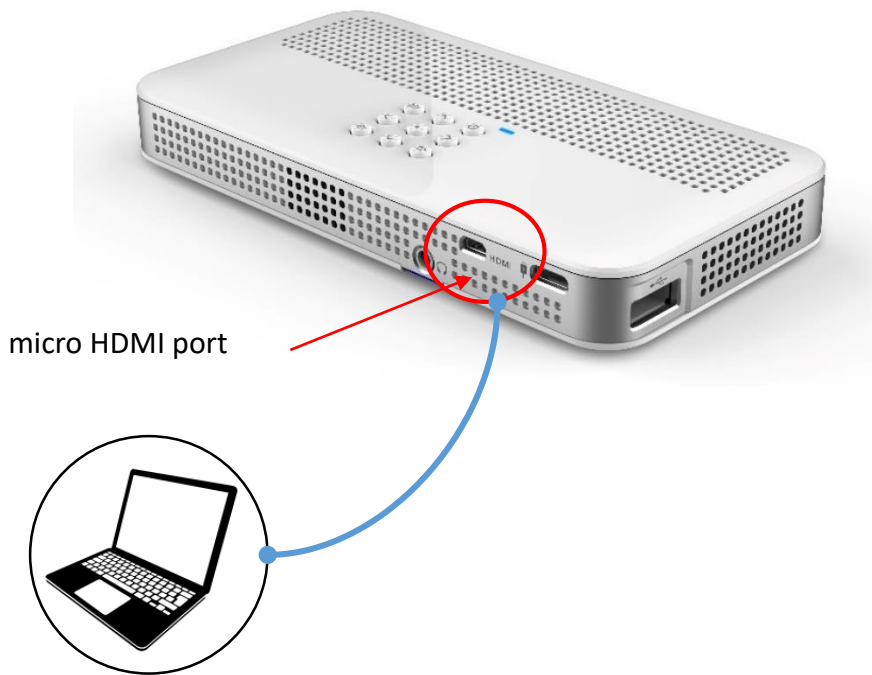


On your Android device, select and run by manufacturer's Android Mirroring Name.

Confirm the name of the projector and connect it to start mirroring.

Connecting to Another Device

Connecting to a PC via HDMI



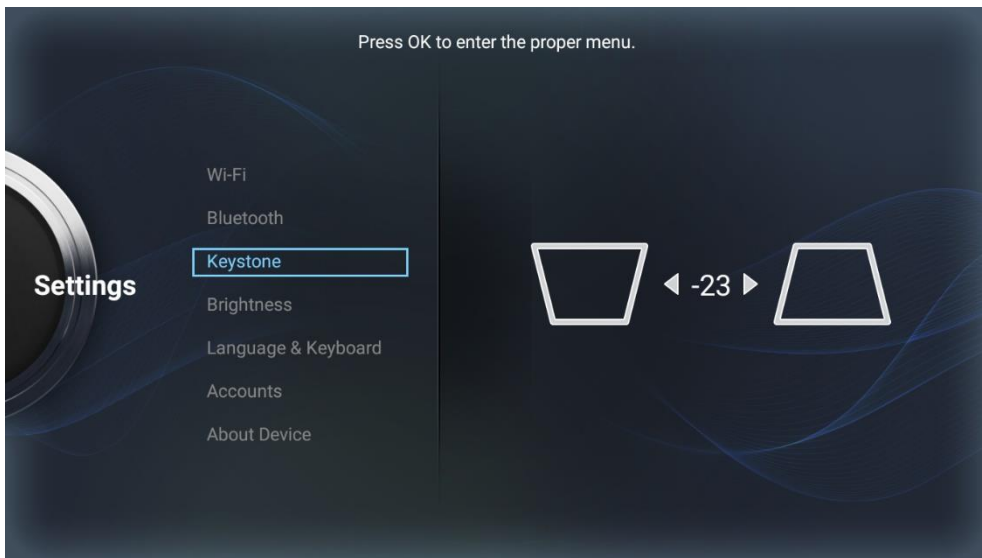
Connect micro HDMI port and your PC with an HDMI cable.

- * It is highly recommended to use a shielded HDMI cable.
- * Up to HDMI Ver. 1.4 is supported. (Higher Ver. HDMI cable can be used depending on the type.)
- * HDMI cable must be purchased separately.

Settings

Keystone Adjustment

You can adjust Keystone in Settings > Keystone.

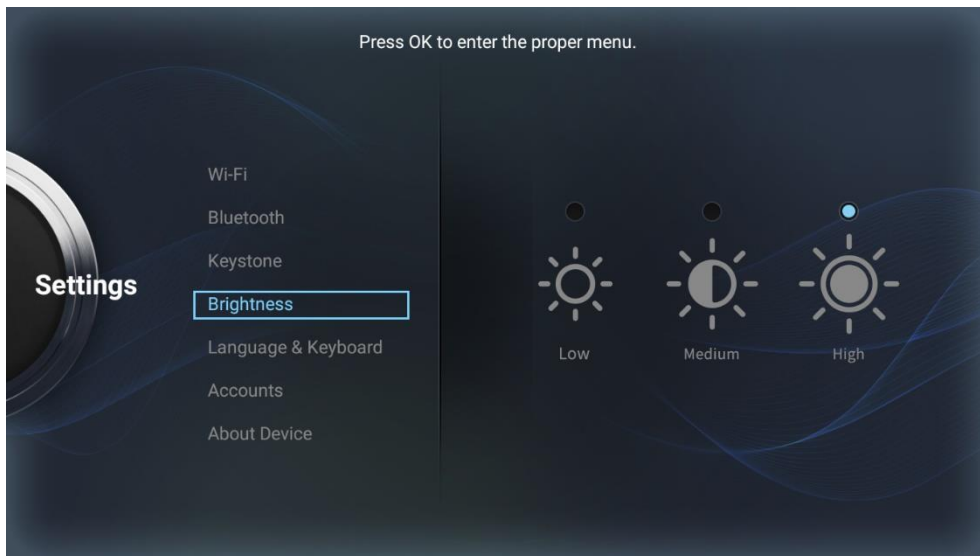


Select a display shape and press the OK button to adjust the Keystone.

Settings

Brightness

Brightness can be adjusted in three steps by selecting Settings> Brightness.

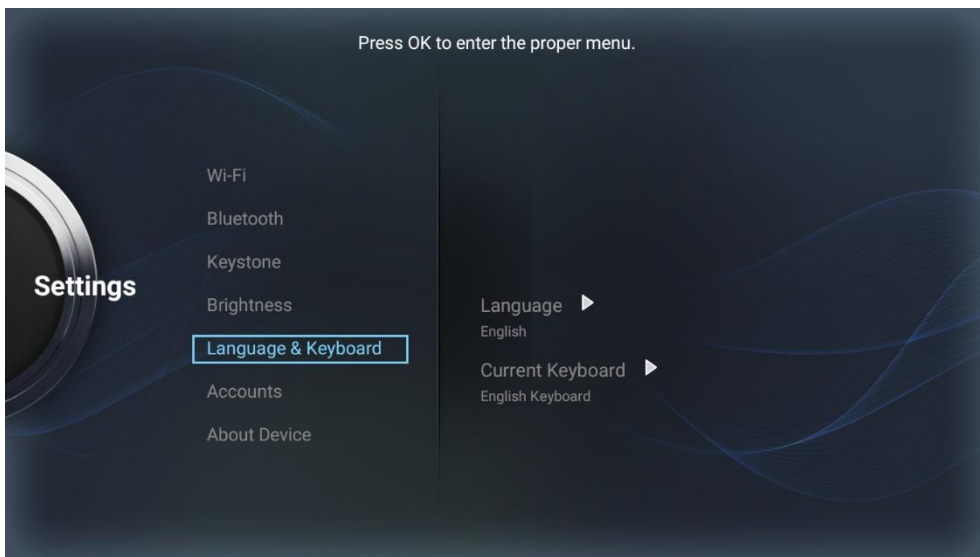


Use Left/Right key button to select your preferred brightness.

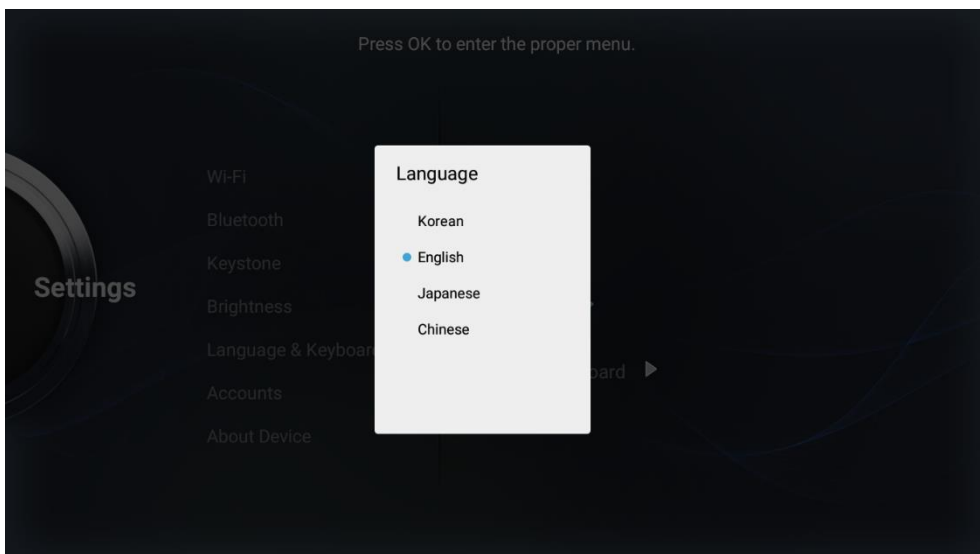
Settings

Language & Keyboard

You can change the language and keyboard in Settings> Languages & Keyboard.



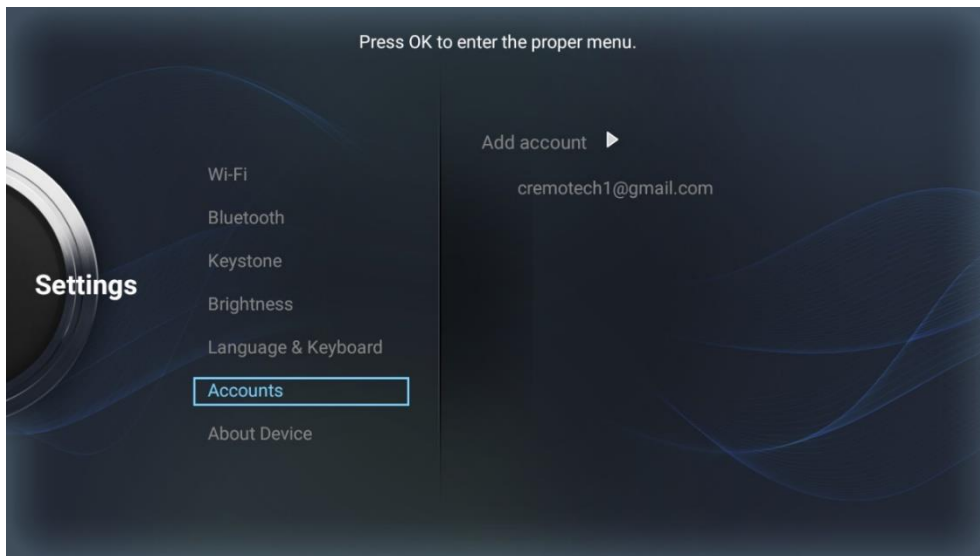
Select the language you want to change and press the OK button to change it.



Settings

Accounts

You can manage your account from Settings> Accounts.



You can delete an account by selecting it.

Settings

Auto Shut-Off Timer

You can set auto shut-off timer in Settings > About Device > Auto Shut-Off Timer.

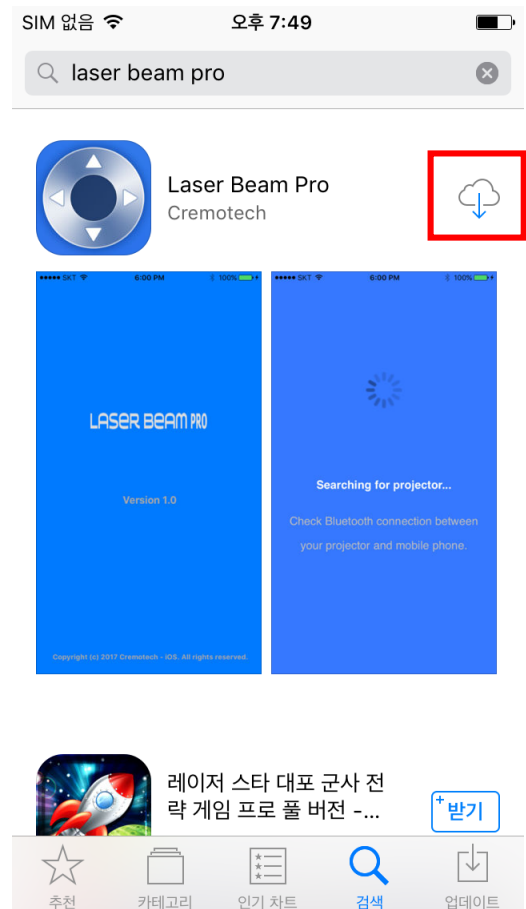
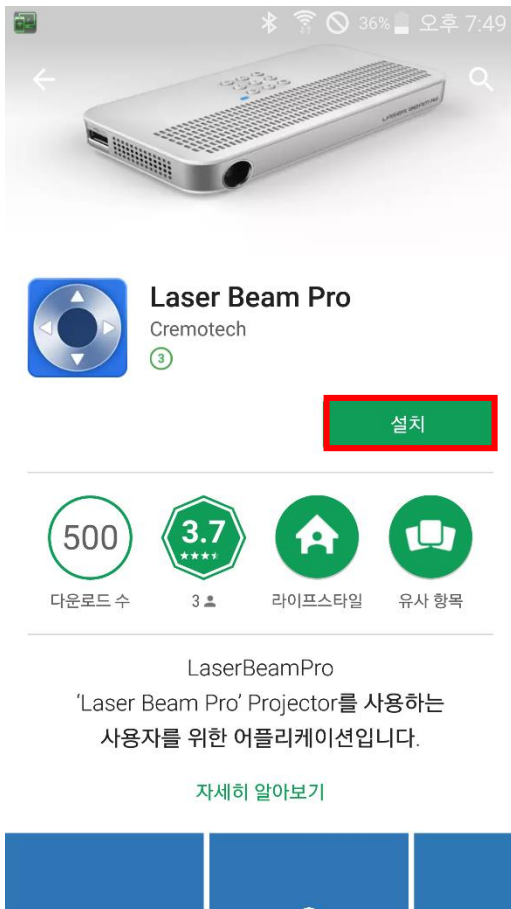


Use Left/Right key button to choose between 5 min, 10 min, 20 min, or none.

Settings

Remote App (1/2)

Download the remote app from Google Play or the App Store and install it on your mobile device. (Search term: LASER BEAM PRO or CREMOTECH)



Connect the remote control app to the projector and use it with the remote control.

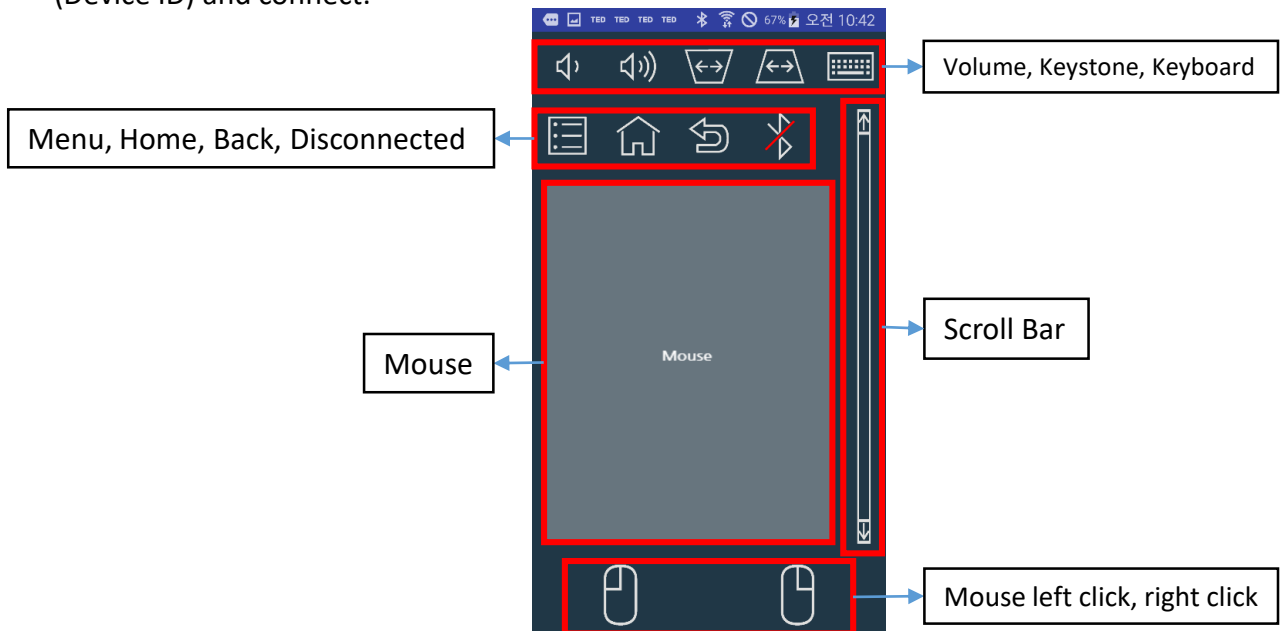
Settings

Remote App (2/2)

On the projector, change to Settings> Bluetooth> "Bluetooth On".



Execute the application and click on the device name of the searched projector (Device ID) and connect.



You can use the mouse on the projector screen, set the sound and keystone, and enter text easily.

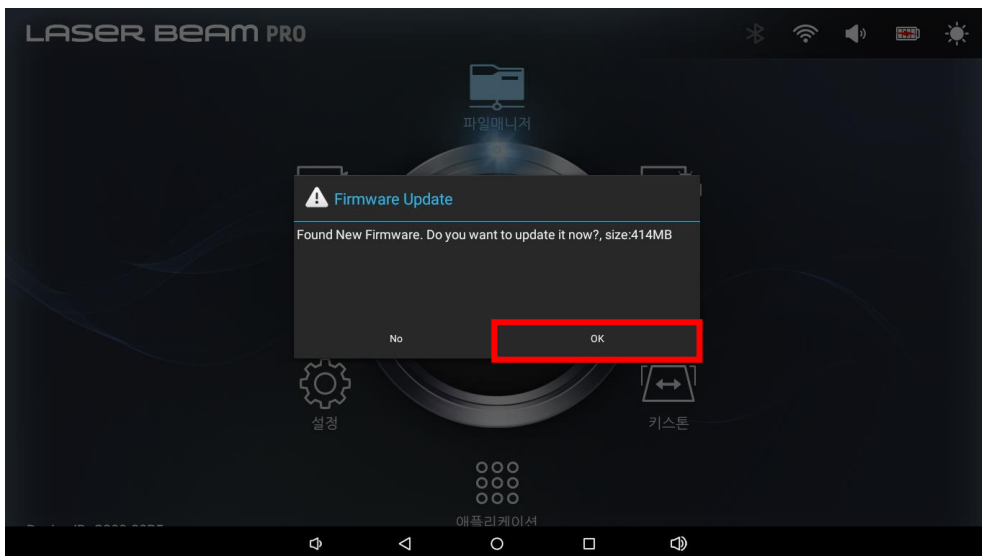
Settings

Auto Software Update

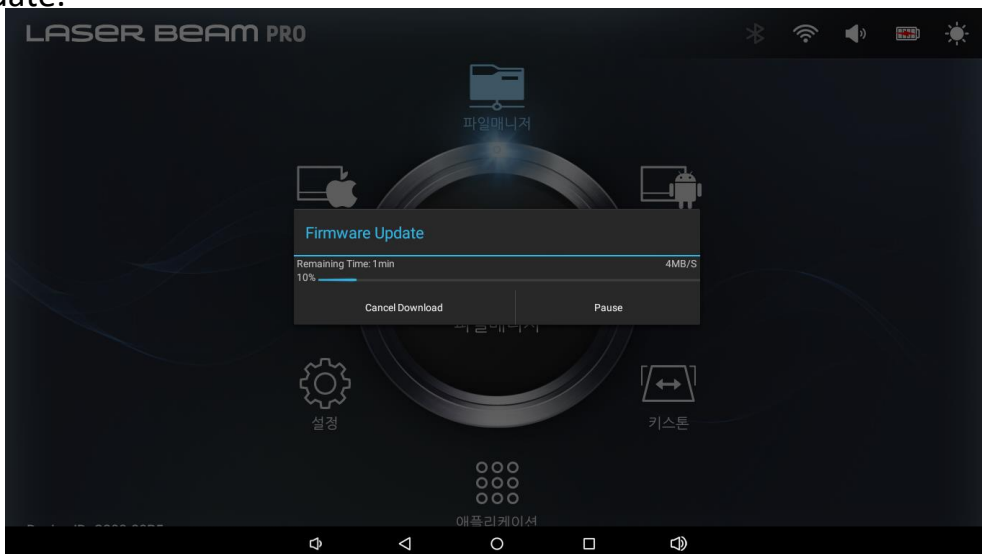
With the latest software upgrade, you can use the product in a stable environment.

The projector must be connected to the Internet.

The Firmware Update pop-up window only appears on the Home screen.



When the above pop-up window appears, click OK to proceed with the update.



Update is done and after the Reboot, update is completed.

Settings

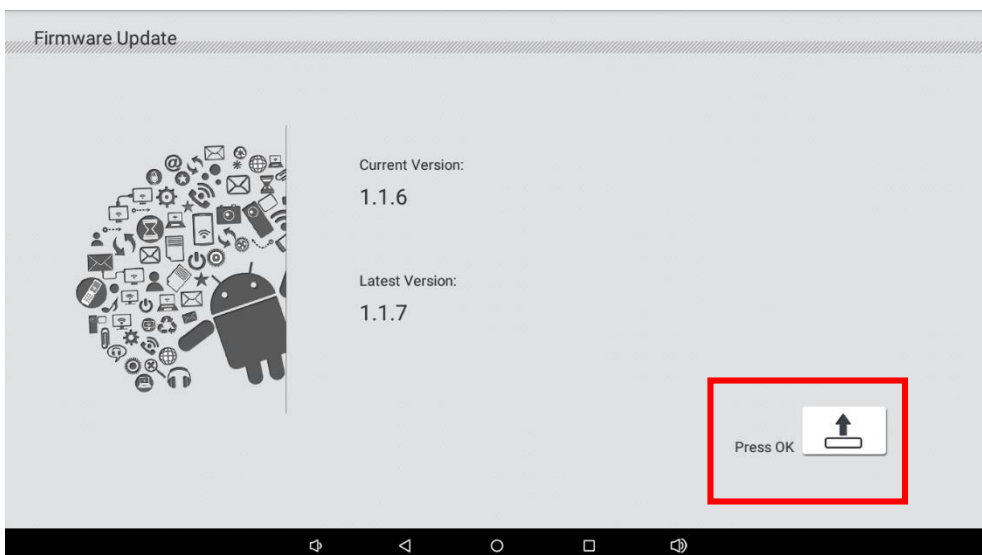
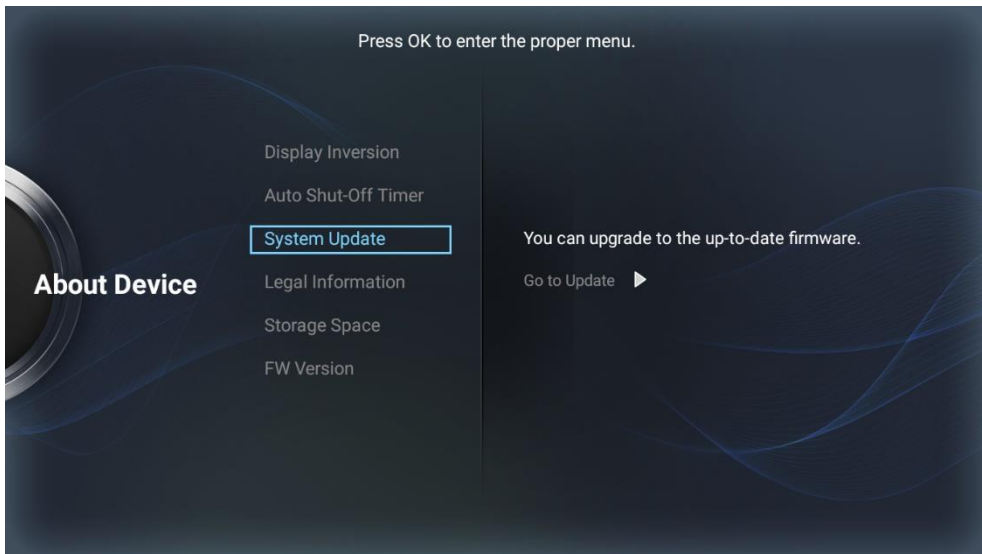
Manual Software Update (1/3)

You can upgrade the projector to the most up-to-date software in order to use it in a more stable environment.

OTA Update

Your projector must be connected to the Internet.

Go to Settings > About Device, and select Software Update.



Settings

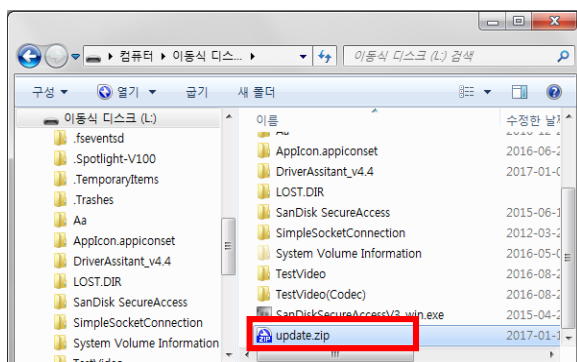
Manual Software Update (2/3)

Updating using USB (or SD card) (1/2)

FAT32 USB storage device and Update.zip file are required.



Please go to <http://www.cremotech.co.kr/manual/> and select download image to download Update.zip file.

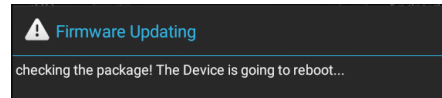
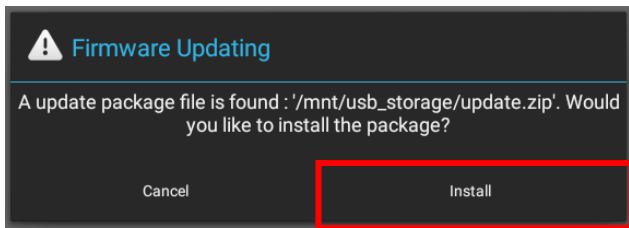


1. Copy the Update.zip file to the FAT32 USB and insert it into the C200 USB port.

Settings

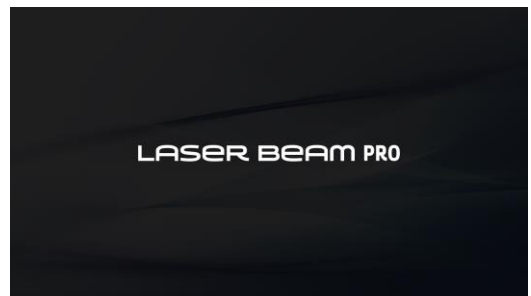
Manual Software Update (3/3)

Updating using USB (or SD card) (2/2)



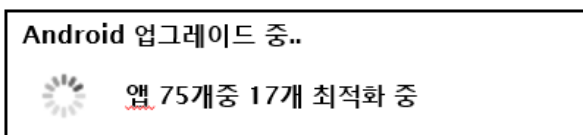
2. Firmware Updating window will be displayed when waiting for a while even if File Manager is displayed.
Click the Install button in the window to proceed with the update.

3. Checking package → Auto Reboot → Update progress (Android robot image)



4. When the update is completed,
The CREMOTECH logo is displayed (if the CREMOTECH logo is displayed, the USB can be removed)

Next, LASER BEAM PRO image is displayed.

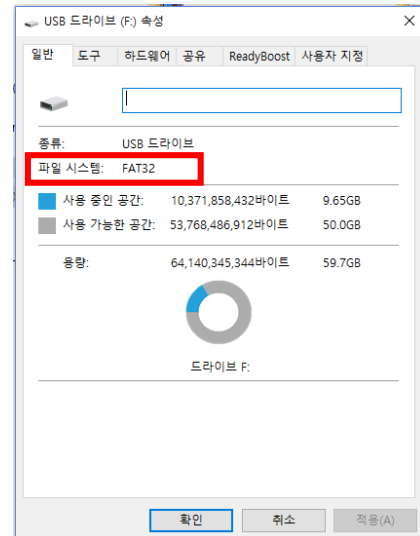
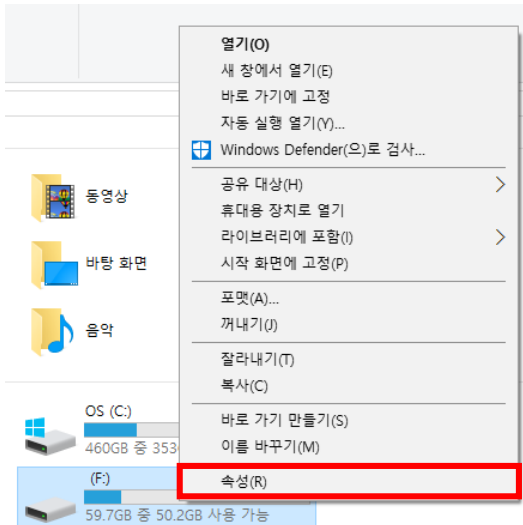


5. After completing steps 1 ~ 75 of the optimization, the update is completed.

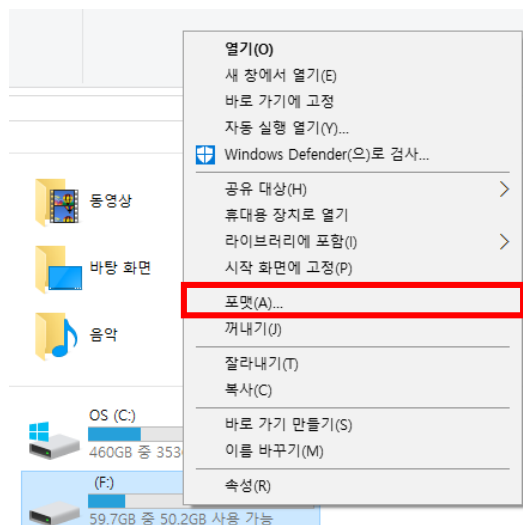
Settings

How to check and format USB

Verifying and Formatting USB



After USB connection, right click on the USB device in My PC (My Computer), and then click Properties to check FAT 32 in the file system.



After USB connection, right click on the USB device in my PC (My Computer) and select format. Then, select FAT 32 from the file system.

Settings

Reset

You can reset the projector when it doesn't seem to be working properly.



You can find the reset hole at the bottom-right on the back of the projector. Use a clip or pin to press the reset button inside and reset the projector.

LED Indicator

Standby Mode	Charging : Red Charging complete : Green
Drive Mode	Charging : Red Charging complete : Green Battery Low: Red (On/Off) - Repeat 5 seconds cycle
Sleep Mode	Charging : Red (On/Off) - Repeat 2 seconds cycle Charging complete : Green (On/Off) - Repeat 5 seconds cycle Battery Low: Red (On/Off) - Repeat 5 seconds cycle

Technical Info.

Specification

Specifications	
Dimensions	149 x 76.2 x 19.4mm
Weight	260g
Battery Capacity	3.7V 6200 mAh
Charger	5V 4A
Processor	Quad Core
RAM	1GB
Internal Storage	8GB
Expandable Storage	Micro SD (up to 128GB)
OS	Android Lollipop
Speaker	1W Mono Speaker
Wi-Fi	802.11 a/b/g/n (2.4/5.0 GHz)
Bluetooth	v4.0
HDMI Input	micro HDMI
Audio Output	3.5 mm Audio Jack
Wireless Display	Android/iOS Screen Mirroring
USB	USB 2.0 Host

Projector Features	
Resolution	WXGA (1366 x 768)
Brightness	200 lumens (Max.)
Focus Type	Focus Free
Keystone	Manual Keystone
Screen Size	20" ~ 100"
Throw Distance	60cm ~ 300cm
Light Source	Laser Diode
Laser Class	Eye Safety Class I
Operating Time	120 minutes

Safety Warning and Caution

We sincerely appreciate your purchase of our product. Please read all the safety information prior to using this product.



Warning

Failure to adhere to these instructions may result in fire, injury, or damage to the product or other property.

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.

Do not use this product while driving a car.

This may result in a dangerous situation such as a traffic accident. This could be punishable by law.

Do not install, disassemble or modify.

Arbitrary installation, disassembling or modification may cause device failure, explosion, fire, or electrocution. The manufacturer is not liable for such damage.

* Warning: You may be exposed to harmful radiation if you arbitrarily install, disassemble, or modify this product.

Do not submerge in water. Do not leave or use in excessively humid areas.

This product is not water-proofed. Exposure to water or excessive humidity could lead to fire or electrocution.

The packaging material included is not suitable for recreational use.

The plastic bags and metal parts included in the packaging material are not suitable for children or pets to use as toys.

Do not expose to excessive heat such as from a heater, microwave oven, or hair dryer.

This could cause warping, explosion or malfunctioning.

Avoid leaving or using this product in direct sunlight, excessively dusty areas, areas where water or splashing may occur, excessively humid areas, near heating appliances (heater, microwave oven, etc.), or near flammable substances (Gasoline, paint thinner, flammable spray, etc.)

This may cause fire or electrocution as well as malfunctioning due to damage to the product.

Do not insert metallic objects, such as hair pins, easily flammable paper, or matchsticks, into the product.

This may cause fire, electrocution, or malfunctioning due to damage to product.

Do not block the ventilation outlet while using the product with a tablecloth or curtain.

This may cause fire or explosion due to increased internal temperature.

This product is designed to be operated and stored in ambient temperatures between 10°C and 40°C.

This product can be damaged and battery life shortened if stored or operated outside of this temperature range. Please be especially careful when the product is inside a vehicle, since temperatures may reach 80°C which can cause an explosion. When this product is in use or the battery being charged, it is normal for it to get warm.

Do not handle this product or plug with wet hands.

This may cause electrocution.

Do not look directly into the lens while the product is being operated, and do not aim the lens at people or pets.

Strong rays may cause damage to the eyes.

Stop using this product in the event of smoke or unpleasant order. Turn off the power and unplug.

This may cause fire or electrocution.

In the event of a foreign object being inserted into the product, turn off the power, unplug and call the service center.

Foreign objects or water in the product may cause fire or electrocution.

Do not block the ray from lens with a book or other object.

Long exposure to the ray may cause fire due to the high temperature. Reflected heat may also damage the product.

Prevent heavy impact on the product and do not scratch with sharp objects.

This may cause damage to the product and lead to its malfunction.

Do not let children or pets lick the product.

Exterior material may cause allergic reactions as well as causing damage to the product.

Do not use this product while holding it in the hands or making body contact.

Heat from the beam projector may cause burn injuries. It is recommended to maintain a distance of at least 20cm from the product while it is in use.

Recommended distance from the screen is 2 to 3 times the diagonal length of the screen.

Viewing in close approximation for a prolonged period of time may damage your eyes.

Do not use the product for a prolonged period of time.

Prolonged viewing could lead to damage to the eyes. It is recommended to take adequate rest from viewing at one hour intervals. If you experience eye sight difficulty or problems during viewing, stop viewing immediately.

Only use charger and cables authorized and issued by the manufacturer.

Other products may not function properly and cause damage to the product or battery.

Make sure you check the voltage and type of plug before use.

These may vary in depending on the country.

Do not twist or pull the cable forcefully, and do not change the cable too regularly or place heavy objects it.

Failure to follow this guidance may lead to damage to the cable, malfunction, or electrocution.

Do not touch the lens directly with the hands, fingers or skin.

A dirty or smudged lens leads to lower image quality.

When cleaning the product, wipe slowly with a soft, dry cloth.

Ensure the charger is disconnected from the product and that the power is off. Do not use solvents, alcohol or thinner to wipe the product.

Caution: Potentially hazardous radiation may be emitted from this device.

As with any bright light source, do not stare into the beam, RG2 IEC62471-5:2015.

Use of controls or adjustments or performance of procedures other than those specified herein may result in exposure to hazardous radiation.

Read the following instructions carefully in order to handle the battery safely.

The battery takes approximately 4 hours to charge and has a standard operating time of approximately 2 hours.

*Charging time is measured with an authentic charger and cable.

*Battery usage and operating time are based on the battery in its initial state.

When the battery has no charge, the lamp does not light up even if the charger is connected. Charge for at least a few minutes before using.

Battery life gradually diminishes with repeated use. Once the battery life has diminished to half that of its original state, replace it with a new battery through the service center.

Installing the Product

Install the product on a flat, stable surface.

When using the product while connected to a charger, ensure use at an appropriate distance from the power outlet in order to avoid breaking the connection. Infliction of shock or impact to the charger or cable could lead to product **failure** or damage to the terminal.

Please refrain from using the product in the following places:

Hospitals or near medical equipment that is affected by high wave frequencies

Near cardiac defibrillators or hearing aids

Near many electronic and/or wireless devices (kitchens, cars, aircraft cabins etc.)