

OWNER'S MANUAL

# 3D GLASSES

Please read this manual carefully before operating and keep it for future reference.

AG-S230

AG-S250

AG-S270

### **CAUTION**

Please read these safety instructions carefully to ensure your personal safety and to prevent damage.

- 1 If you experience difficulty while viewing 3D images with the 3D glasses, you may have some problems with your eyesight.
- You may experience headaches or fatigue when viewing 3D images through the glasses for too long.

If you experience headaches, •• fatigue, or dizziness, stop watching immediately.

- Do not drop objects onto the product or import force to the product.

  This may result in electric shock or fire.
- Do not use your product near a humidifier or kitchen counter.

This may result in electric shock or fire.

- Do not disassemble, repair or modify the product or its parts.

  Failing to do so may result in damage to the product or a malfunction.
- The product may be easily taken off after putting on for some people.
- The following people should not use this product: Pregnant women, infirm persons, persons with heart issues, as well as persons that become nauseous easily.

  People with these conditions should not use this product.
- When watching 3D video, do not place anything nearby that can be easily broken. You may mistake a 3D image for an actual object and move your body, causing you to break nearby objects and hurt yourself.
- 9 Use this product for watching 3D video only. Do not use it for any other purpose. Do not use the 3D Glasses as sunglasses or reading glasses.

Do not spray cleaner directly onto the surface of the product.

This may result in discoloration and graphs and may cause the screen display.

This may result in discoloration and cracks and may cause the screen display to peel off.

- Do not let water come into contact with the product when cleaning it. Ensure that water does not enter the product.

  This may result in electric shock or fire.
- Since the lens of the product is easily scratched, make sure to clean the product with a soft cloth.

  As the product may be scratched if there is any foreign material on the cloth, make sure to shake off any dust before using it.
- Do not scratch the surface of the Liquid crystal shutters with a sharp tool and do not clean it using chemicals.
- Do not apply force to the 3D Glasses' Lenses. Do not drop or bend the product.
- When watching 3D video, ensure that you are viewing the video within the specified receiving range. (For more information, please refer to the user manual of the TV or the PROJECTOR.)

  If the receiving range is out of the specified range, the screen may not be viewable as 3D video.
- Flickering may be generated by the 3D glasses (60 Hz) when watching the 3D screen when a magnetic fluorescent lamp (50 Hz) is on.

  If you encounter this symptom, please turn off the light and continue watching.
- The 3D glasses are a wireless communications device that use the 2.4GHz frequency band and may be interfered by devices, such as the microwave oven or the wireless LAN.

  Wireless performance may also be interfered when there is a physical barrier between the 3D glasses and the 3D TV or PROJECTOR.
- Children should be closely supervised when using the 3D glasses and should stop using them in the cases of fatigue, twitching of the eye or face muscles, or other involuntary movements.
- If adults wear the 3D glasses for children (AG-S230), this may cause damage to the device.
- Using 3D glasses may cause minor inconveniences. If you are wearing your regular glasses, adjust the nose pad of the 3D glasses up 90 degrees before wearing.

## **FEATURES**

- AG-S230/S250/S270 are 3D glasses using RF(2.4GHz) wireless communication. If the device is connected to the TV or PROJECTOR that supports the RF glasses, you can enjoy the vivid 3D images.
- You can enjoy movies or pictures made as 3D.

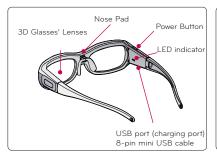
# **ACCESSORIES**



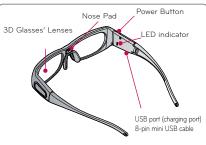
 $lue{\mathbb{Q}}$  NOTE  $lue{\mathbb{Q}}$  The accessories represented in this manual may differ from the actual appearances.

#### **PART NAMES**

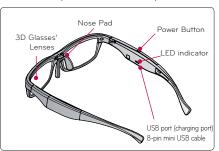
AG-S230 (For Children)



#### AG-S250 (For Audlts)



## AG-S270 (Made of Metal)



## **USING 3D GLASSES**

	Button Operation	LED Indication
Power On	Press the Power button once.	The red LED blinks once.
Power Off	Press and hold down the Power button (2 second ~3 second)	The red LED blinks three times.
Auto Off*1	The device is automatically switched off if there is no 3D signal for more than one minute.	The red LED blinks three times.
Battery (Lithium polymer) discharge	-	If the battery is discharged, the LED blinks for 1 minute and turns off automatically.  * When charging is completed, the LED is lit green.
How to connect the glasses	-	When initially switched on, the device will automatically be connected to the TV or PROJECTOR with the strongest signal.
How to re-connect the glasses*2	Press the power button for over eight seconds.	Release the button when the green LED light turns on. Then, you will see the green light blink three times before the device is switched off. If you switch the power on again, the glasses will be connected to the TV or PROJECTOR with the strongest signal.

- The Auto Off function automatically switches the power off when the glasses lose signal from the TV or the PROJECTOR. This may occur when the distance or angle between the device and the TV or PROJECTOR are out of range; when there is a barrier between the two devices; or when the device is switched from 3D to 2D mode.
- The device recognizes the unique ID of the TV or PROJECTOR to which it is connected. Thus, IDs of other TVs or PROJECTORs are not recognized by the device. If you wish to re-connect the device to other TVs or PROJECTORs, please see "How to re-connect the glasses". (see how to use the 3D glasses)

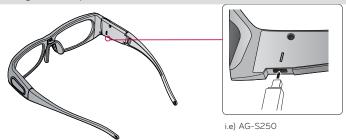
You can view 3D images with the device even while recharging it with a USB cable. During recharge, the LED light of the device indicates:

When the device is on and there are 3D images:	The red light blinks every second during recharge and the green light blinks every second when fully recharged.
When the device is off or on and there are no 3D images	Either the red or the green light stays on depending on the recharge status.

## **CHARGING THE GLASSES**

1 Connect the USB port located under the power button on the glasses to the USB port of the TV or PC using the supplied 8-pin mini USB cable as shown by the figure.

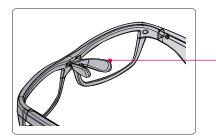
▲ CAUTION ► Do not insert the supplied 8-pin mini USB cable in the reverse direction. Otherwise, this may cause damage to the product.



- Charge the glasses until the LED is green. The glasses will fully charge in about 1 hours 50 minute.
  - **NOTE** While charging: The LED is red.
    - ▶ When charging is complete: The LED is green.
    - When the battery is discharged: The LED blinks for 1 minute and turns off automatically.
  - **A** CAUTION
- ▶ If you use a USB cable other the one (8-pin mini USB) supplied with the product, the product may be damaged.
- ▶ This equipment shall be powered with USB 2.0 or higher.

## **HOW TO WEAR THE 3D GLASSES**

Using 3D glasses may cause minor inconveniences. If you are wearing your regular glasses, adjust the nose pad of the 3D glasses up 90 degrees before wearing.



Please refer to the picture below for instructions. Adjust the angle to find the most comfortable state for you.

## **TROUBLESHOOTING**

Problem.	Suggestion.
<b>Q.</b> The glasses do not work.	<ul><li>A. The battery (Lithium Polymer) may be discharged, charge the battery with the 8-pin mini USB cable.</li><li>A. Please also check the 3D settings on the TV or PROJECTOR.</li></ul>
Q. The led LED blinks continuously.	<b>A.</b> This occurs when the battery (Lithium Polymer) is discharged. In this case, charge the battery with the supplied 8-pin mini USB cable.
<b>Q.</b> I charged the glasses with the 8-pin mini USB cable, but it is not charged.	A. Check if the 8-pin mini USB cable is properly connected to the product.

## **SPECIFICATIONS**

	AG-S230 / S250	AG-S270
Shutters	Liquid crystal	Liquid crystal
Contrast Ratio	Max. 1000:1	Max. 2000:1
Transmittance	Over 34 %	Over 34 %
Field Rate	120 fields/s	120 fields/s
Open Time	Under 2.0 ms	Under 2.0 ms
Close Time	Under 0.3 ms	Under 0.3 ms
Weight	About 36 g	About 43 g
Power Supply	<ul><li>USB Cable: 8-pin mini USB cable</li><li>Battery: 80 mA/h</li><li>Operating time when On: About 40 hours</li></ul>	<ul><li>USB Cable: 8-pin mini USB cable</li><li>Battery: 75 mA/h</li><li>Operating time when On: About 40 hours</li></ul>
Operating Temperature	0 °C to 40 °C	0 °C to 40 °C
Storage Temperature	-20 °C to 60 °C	-20 °C to 60 °C

The images and specifications presented in this user manual are subject to change without prior notice for quality improvement purposes.

Class B ITE (Information Technology Equipment)

This equipment satisfies the EMC requirements and is intended for use in all environments, including the domestic environment.

(Class B ITE produces less electromagnetic emissions than Class A ITE.)



#### English Disposal of your old appliance

- 1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
- 2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
- 3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
- For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.



#### English Disposal of waste batteries/accumulators

- 1. When this crossed-out wheeled bin symbol is attached to batteries/accumulators of Your product it means they are covered by European Directive 2006/06/EC.
- 2.This symbol may be combined with chemical symbols for mercury(Hg), cadmium(Cd) or lead(Pb) if the battery Contains more that 0.0005% of mercury, 0.002% of cadmium or 0.004% of lead.
- 3. All batteries/accumulators should be disposed separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
- 4. The correct disposal of Your old batteries/accumulators will help to prevent potential negative consequences for the environment, animal and human health.
- 5. For more detailed information about disposal of Your old batteries/accumulators, please contact Your city office, waste disposal service or the shop where You purchased the product.



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.

#### Note

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.

Modifications not expressly approved by the manufacturer could void the user's authority to operated the equipment under FCC rules.

#### Warranty Period

1 year. (Europe : 2 Year)

If it proves to be defective with regards to the materials or workmanship under normal operating conditions during the warranty period, please contact the retailer where you purchased it. This warranty is only valid for the original purchaser of the product and is only effective locally.

