



OWNER'S MANUAL

SET-TOP BOX

Please read this manual carefully before operating your set and retain it for future reference.

STB-3000

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### WARNING

- If you ignore the warning message, you may be seriously injured or there is a possibility of accident or death.



### CAUTION

- If you ignore the caution message, you may be slightly injured or the product may be damaged.



### NOTE

- The note helps you understand and use the product safely. Please read the note carefully before using the product.

## LICENSES

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## OPEN SOURCE SOFTWARE NOTICE INFORMATION

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

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to [opensource@lge.com](mailto:opensource@lge.com). This offer is valid for three (3) years from the date on which you purchased the product.



# SAFETY INSTRUCTIONS

- Please read these safety precautions carefully before using the product.
- In this manual, the illustration may be somewhat different from your product because it is just example to help the instruction.
- Manufacturer and installer cannot provide service related to human safety as the applicable wireless device has possibility of electric wave interference.



## WARNING



- Keep away from heat sources like electrical heaters.
  - Electrical shock, fire, malfunction or deformation may occur.



- Keep the packing anti-moisture material or vinyl packing out of the reach of children.
  - Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.



- Do not use the product in damp place such as a bathroom or any place where it is likely to get wet.
  - This may cause a fire or could give an electric shock.



- Do not place the product where it might be exposed to dust.
  - This may cause a fire hazard.



- Do not leave the power or signal cable unattended on the pathway.
  - The passerby can falter, which can cause electrical shock, fire, product breakdown or injury.

- TV and Set-Top Box shall be installed and used on distance greater than 20cm from human body.



- Install the product in a neat and dry place.
  - Dust or moisture can cause electrical shock, fire or product damage.



- If you can smell smoke or other odors or hear a strange sound unplug the power cord and contact the service center.
  - If you continue to use without taking proper measures, electrical shock or fire can occur.



- Do not put heavy objects on the product or sit upon it.
  - If the product collapses or is dropped, you may be injured. Children must pay particular attention.



- If you dropped the product or the case is broken, turn off the product and unplug the power cord.
  - If you continue to use without taking proper measures, electrical shock or fire can occur. Contact the service center.



- Do not drop metallic objects such as coins, hair pins, chopsticks or wire into the product, or inflammable objects such as paper and matches. Children must pay particular attention.
  - Electrical shock, fire or injury can occur. If a foreign object is dropped into the product, unplug the power cord and contact the service centre.



- Install the product where no radio wave occurs.



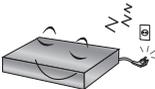
- Make sure to connect Mains cable to compliant AC mains socket with Grounded earth pin. (Except for devices which are not grounded on earth.) Otherwise possibility you may be electrocuted or injured.



- Insert power cable plug completely into wall socket otherwise if not secured completely into socket, fire ignition may break out.



- Do not touch the power plug with wet hands. Additionally, if the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off. You may be electrocuted due to excess moisture.



- If you don't intend to use the product for a long time, unplug the power cable from the product.
  - Covering dust can cause a fire, or insulation deterioration can cause electric leakage, electric shock or fire.



- Never touch this product or antenna during a thunder or lightning storm.
  - You may be electrocuted.



- Do not insert any metal objects/conductors (like a metal chopstick / cutlery / screwdriver) between power cable plug and input Wall Socket while it is connected to the input terminal on the wall. Additionally, do not touch the power cable right after plugging into the wall input terminal. You may be electrocuted.

- **DISCONNECTING DEVICE FROM MAINS**
  - Mains plug is the disconnecting device. The plug must remain readily operable.



- Make sure to turn off the product. Make sure to remove all cables before moving the product.
  - You may be electrocuted or the product can be damaged.



- Do not disassemble, repair or modify the product at your own discretion.
  - Fire or electric shock accident can occur.
  - Contact the service centre for check, calibration or repair.



- Do not spray water on the product or scrub with an inflammable substance (thinner or benzene). Fire or electric shock accident can occur.



- To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

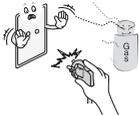
- Do not put heavy objects or many objects on the product.
  - It may disable normal wireless connection with the TV or cause problem to the product.



- Do not allow any impact, shock or any objects to fall into the unit, and do not drop anything onto the screen.
  - You may be injured or the product can be damaged.



- In the event that an image does not appear on the screen please switch it off and unplug it from the mains supply and contact your service centre.
  - This may cause a fire or electric shock hazard.



- Never touch the wall outlet when there is leakage of gas, open the windows and ventilate.
  - It may cause a fire or a burn by a spark.



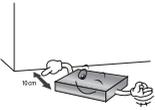
- Do not place anything containing liquid on top of the product such as flowerpot, cup, cosmetics or candle.
  - This may cause a fire hazard.



- If water is split into the product, unplug it from the mains supply outlet immediately and consult your service centre.
  - This may cause an electric shock hazard.



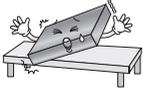
- Do not install this product on a wall if it could be exposed to oil or oil mist. This may damage the product and cause it to fall.

**CAUTION**

- Make sure the product ventilation hole is not blocked. Install the product in a suitably wide place (more than 10cm from the wall)
- If you install the product too close to the wall, it may be deformed or fire can break out due to internal heat.



- Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
- The product can be deformed or fire can break out due to overheating inside the product.



- Install the product on a flat and stable place that has no risk of dropping the product.
- If the product is dropped, you may be injured or the product may be broken.



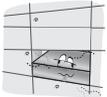
- When installing the product on a table, be careful not to place it near the edge.
- This may cause the product to fall causing serious injury to a child or adult and serious damage to the product. Only use a suitable stand.



- Do not place the product close to source of steam or oil such as a humidifier.
- This may create a fire hazard or an electric shock hazard.



- Keep the product away from direct sunlight.
- The product can be damaged.



- Do not place the product in a built-in installation such as bookcase or rack.
- Ventilation required.



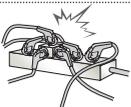
- Do not unplug the power cord while the product is in use.
- Electrical shock can damage the product.



- Ensure the power cord does not come into contact with hot objects such as a heater.
- This may cause a fire or an electric shock hazard.



- Most appliances recommend they be placed upon a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits.



- Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire.

- As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if you turn off this unit by SWITCH.



- Do not turn the product On/Off by plugging-in or unplugging the power plug to the wall outlet. (Do not use the power plug for switch.)
  - It may cause mechanical failure or could give an electric shock.



- Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.



- Prevent dust collecting on the power plug pins or outlet.
  - This may cause a fire hazard.

- Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized servicer.



- Do not shock the product when moving it.
  - You may be electrocuted or the product can be damaged.
- Make the panel face forward and hold it with both hands to move.
  - If you drop the product, the damaged product can cause electric shock or fire. Contact with the service centre for repair.



- Do not dispose of the product-packing box. Use it when you move.



- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.



- Do not put or store inflammable substances near the product.
  - There is a danger of explosion or fire due careless handling of the inflammable substances.



- Use authorized detergent only when cleaning the product. (Do not use benzene, thinner or alcohol.)
  - Product can be deformed.



- Take a rest from time to time to protect your vision.
- Take a regular break when using with a product for a long time.



- Keep the product clean at all times.



- Do not press strongly upon the panel with a hand or sharp object such as nail, pencil or pen, or make a scratch on it.

- Only use the attachments / accessories specified by the manufacturer.



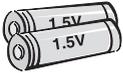
- When cleaning the product surface, unplug the power cord and scrub with soft cloth to prevent scratching. Do not clean with a wet cloth.
  - The water can sink into the product, which can cause electric shock or serious malfunction.



- Contact the service centre once a year to clean the internal parts of the product.
  - Accumulated dust can cause mechanical failure.



- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



- Only use the specified type of battery. This could cause damage to the remote control.



- Do not mix new batteries with old batteries. This may cause the batteries to overheat and leak.

- Batteries should not be exposed to excessive heat. For example, keep away from direct Sunlight, open fireplace and electric heaters.

- Do not place non-rechargeable batteries in charging device.

- Do not use high voltage electrical goods near the product(e.g. electric mosquito-swatter). This may result in product malfunction.



- If water or another substance enters the product (like a AC adapter, power cord, TV), disconnect the power cord and contact the service centre immediately. Otherwise, this may result in fire or electric shock.



- Only use an authorized AC adapter and power cord approved by LG Electronics. Otherwise, this may result in fire, electric shock, malfunction or product deformation.



- Never Disassemble the AC adapter or power cord. This may result in fire or electric shock.



- Be careful in handling the adapter to prevent any external shocks to it. An external shock may cause damage to the adapter.

# ASSEMBLING AND PREPARING

## Unpacking

Check your product box for the following items. If there are any missing accessories, contact the local dealer where you purchased your product. The illustrations in this manual may differ from the actual product and item.



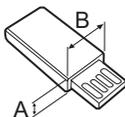
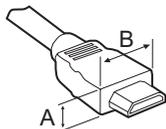
### CAUTION

- Do not use any unapproved items to ensure the safety and product life span.
- Any damage or injuries caused by using unapproved items are not covered by the warranty.



### NOTE

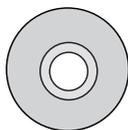
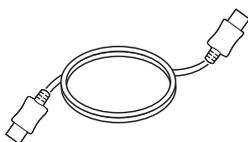
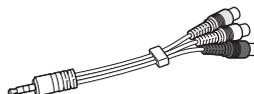
- The items supplied with your product may vary depending on the model.
- Product specifications or contents of this manual may be changed without prior notice due to upgrade of product functions.
- For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm thick and 18 mm width. Use an extension cable that supports USB 2.0 if the USB cable or USB memory stick does not fit into your Set-Top Box's USB port.
- When connecting two USB devices at the same time, each one should have bezels less than 8.5 mm thick.



\*A ≤ 10 mm

\*B ≤ 18 mm

- Use a certified cable with the HDMI logo attached.
- If you do not use a certified HDMI cable, the screen may not display or a connection error may occur. (Recommended HDMI Cable Types)
  - High-Speed HDMI<sup>®</sup>/TM Cable (3 m or less)
  - High-Speed HDMI<sup>®</sup>/TM Cable with Ethernet (3 m or less)

**Set-Top Box****Owner's manual****Power Cord /  
AC-DC Adapter**  
(Depending on model)  
(See p. 15)**HDMI Cable**  
(See p. 16, 17)**TLM Cable**  
(See p. 17)**A/V Adapter Cable**  
(See p. 17)**Dual Lock™**  
(See p. 13)

## Separate purchase

Separate purchase items can be changed or modified for quality improvement without any notification. Contact your dealer to buy these items.

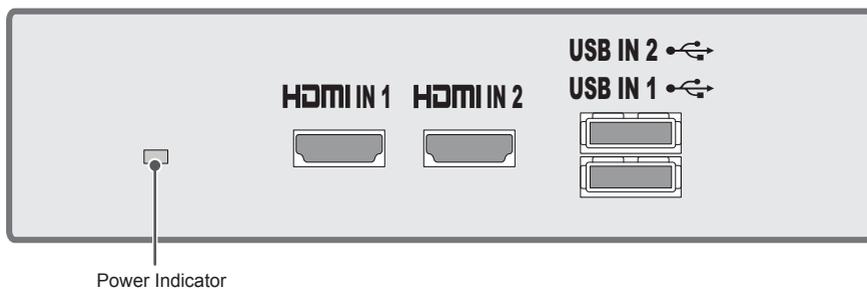
These devices only work with certain models.

The model name or design may be changed depending on the upgrade of product functions, manufacturer's circumstances or policies.

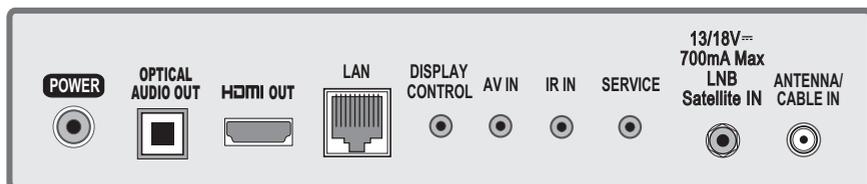
**AN-MR500**  
Magic Remote

## Parts and Components

### Front Panel



### Rear Panel

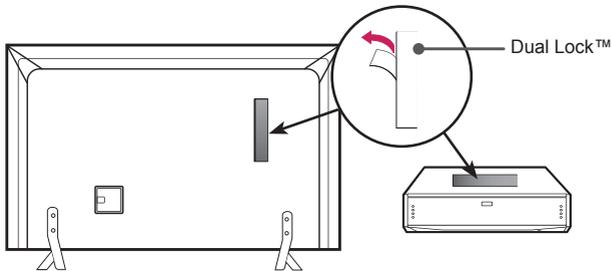


## How to Use Dual Lock™ (optional)

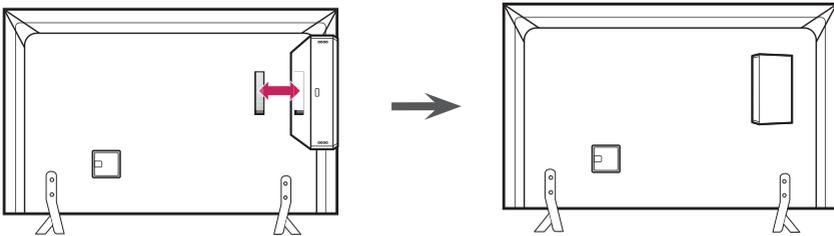
(Image shown may differ from your product.)

Fix the Set-Top Box to the TV and use it when you want to.

- 1 After removing the protection paper from the Dual Lock™, stick it to the TV and the Set-Top Box as shown.



- 2 Attach the Set-Top Box to the TV by pressing the Velcro strips together.



### NOTE

- Please make sure no foreign substances exist on the surface of the product, and then firmly attach the Dual Lock™.
- Before attaching the Set-Top Box to the TV set, let the attached Dual Lock™ dry for at least three days.

## MAKING CONNECTIONS

You can connect various external devices to the product. For more information on external device's connection, refer to the manual provided with each device.

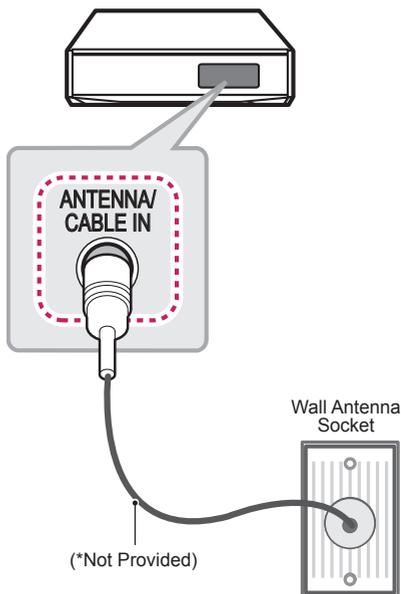
Available external devices are: HD receivers, DVD players, VCRs, audio systems, USB storage devices, PC, gaming devices, and other external devices.

### NOTE

- The external device connections shown may differ slightly from illustrations in this manual.
- Connect external devices to the Set-Top Box regardless about the order of the Set-Top Box port.
- If you record a TV program on a DVD recorder or VCR, make sure to connect the TV signal input cable to the Set-Top Box through a DVD recorder or VCR. For more information about recording, refer to the manual provided with the connected device.
- Refer to the external equipment's manual for operating instructions.
- If you connect a gaming device to the Set-Top Box, use the cable supplied with the gaming device.
- Using a DVI to HDMI cable may cause compatibility issues.

## Antenna Connection

Connect the Set-Top Box to a wall antenna socket with an RF cable (75  $\Omega$ ).

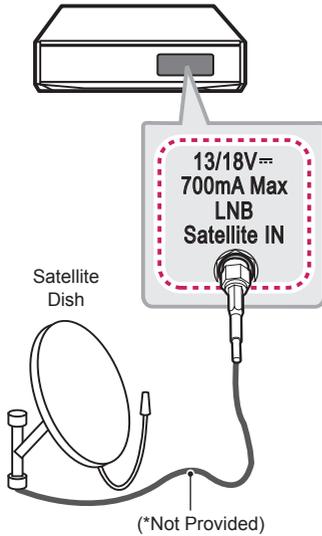


### NOTE

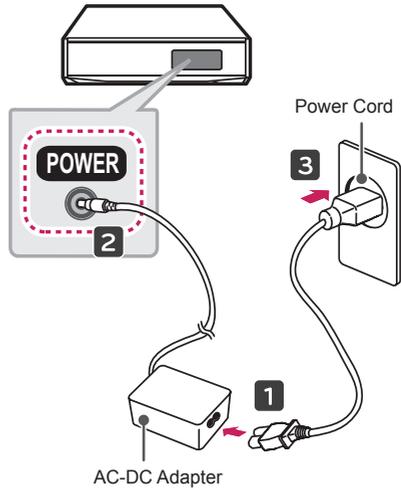
- Use a signal splitter to use more than 2 TVs.
- If the image quality is poor, install a signal amplifier properly to improve the image quality.
- If the image quality is poor with an antenna connected, try to realign the antenna in the correct direction.
- An antenna cable and converter are not supplied.
- Supported DTV Audio: MPEG, Dolby Digital, Dolby Digital Plus, HE-AAC

## Satellite Dish Connection

Connect the Set-Top Box to a satellite dish to a satellite socket with a satellite RF cable (75  $\Omega$ ).



## Adapter Connection



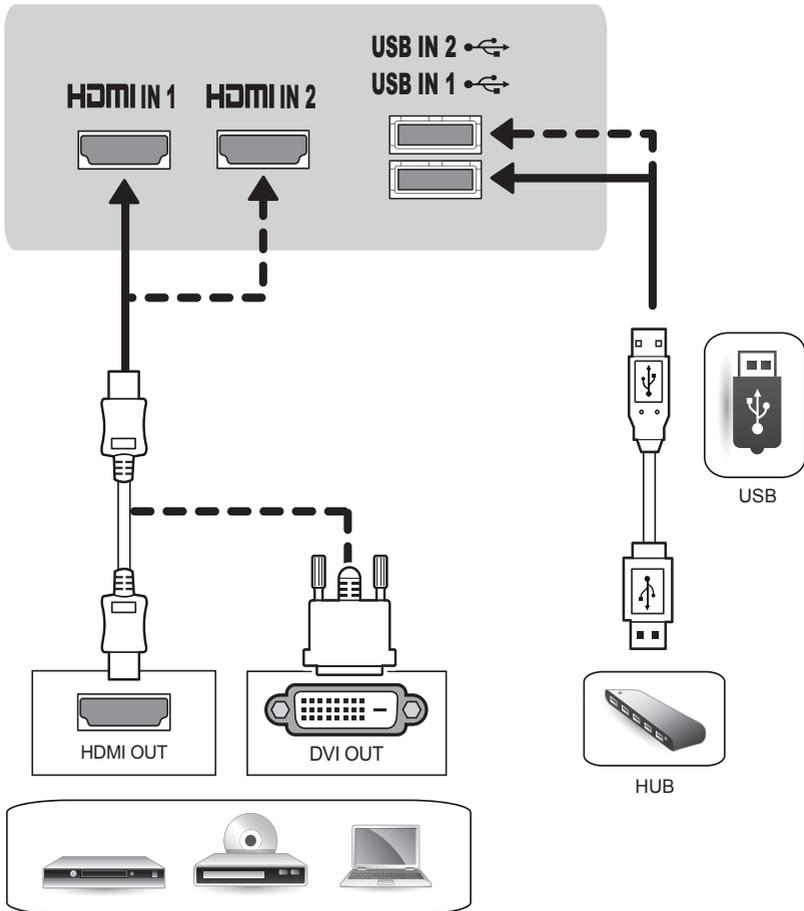
### CAUTION

- Please be sure to connect the Set-Top Box to the AC-DC power adapter before connecting the Set-Top Box's power plug to a wall power outlet.

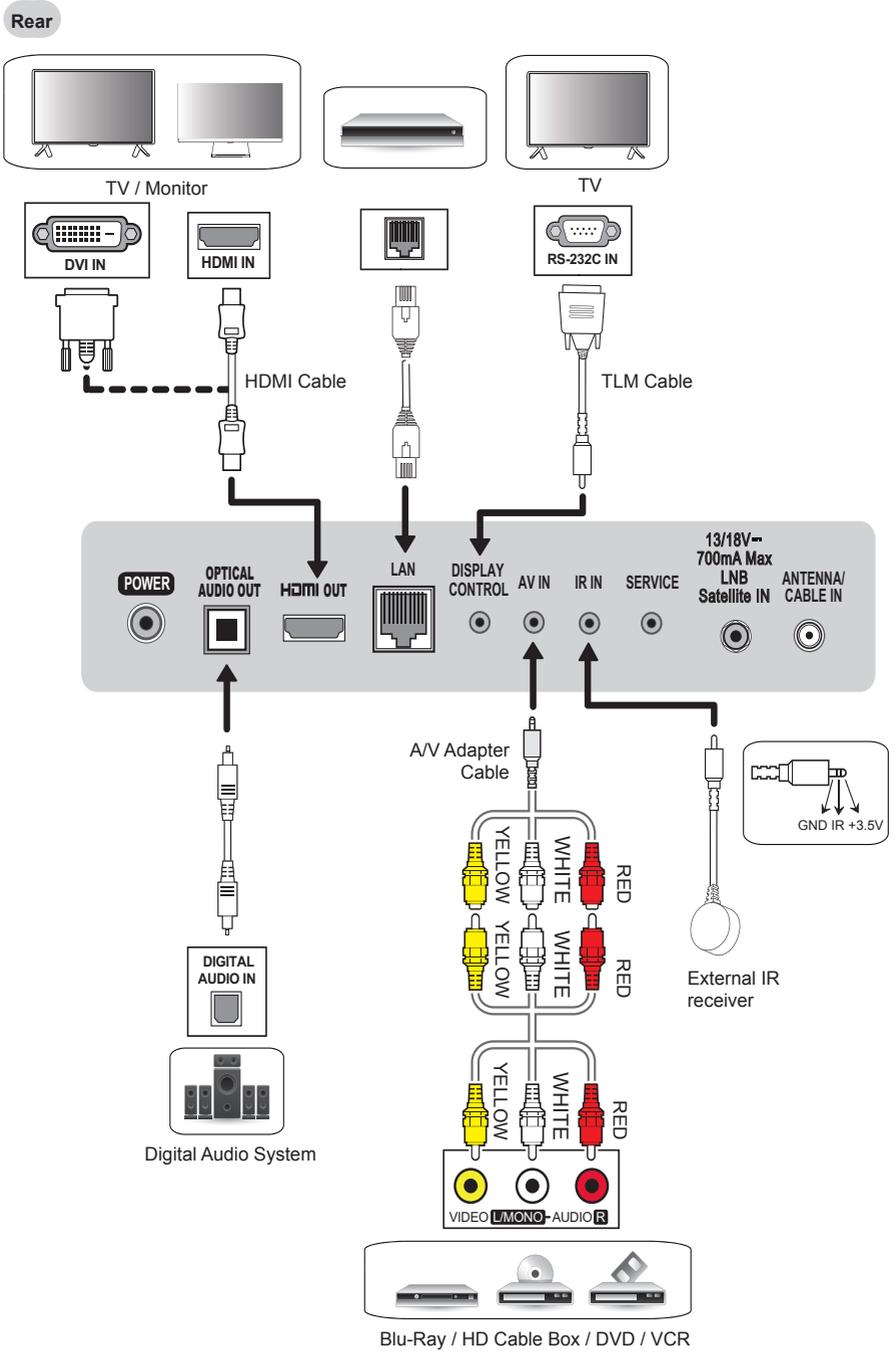
## Other Connections

Connect your Set-Top Box to external devices. For the best picture and audio quality, Connect the external device using an HDMI cable as shown. Some separate cable is not provided.

### Front



Blu-Ray / HD Cable Box / HD STB / DVD / PC



## MAINTENANCE

### Cleaning your Set-Top Box

Clean your Set-Top Box regularly to keep the best performance and to extend the product lifespan.

To remove dust or light dirt, wipe the surface with a dry, clean, and soft cloth.

To remove major dirt, wipe the surface with a soft cloth dampened in clean water or a diluted mild detergent. Then wipe immediately with a dry cloth.

Remove the accumulated dust or dirt on the AC-DC adapter regularly.



#### CAUTION

- Make sure to turn the power off and disconnect the power cord and all other cables first.
- When the Set-Top Box is left unattended and unused for a long time, disconnect the power cord from the wall outlet to prevent possible damage from lightning or power surges.
- Do not push, rub, or hit the screen surface with your fingernail or a sharp object, as this may result in scratches and image distortions.
- Do not use any chemicals as this may damage the product.
- Do not spray liquid onto the surface. If water enters the Set-Top Box, it may result in fire, electric shock, or malfunction.

## TROUBLESHOOTING

The software version can be updated for improvement in performance. Customer needs to ensure the compatibility of customer's equipment with LGE software. If needed, please consult with LGE and upload revised software version according to the guidance provided by LGE.

Problem	Solution
Cannot control the Set-Top Box with the remote control.	<ul style="list-style-type: none"> <li>• Check the remote control sensor on the product and try again.</li> <li>• Check if there is any obstacle between the product and the remote control.</li> <li>• Check if the batteries are still working and properly installed ( ⊕ to ⊕, ⊖ to ⊖ ).</li> </ul>
Set-Top Box does not output any video or audio.	<ul style="list-style-type: none"> <li>• Check if the product is turned on.</li> <li>• Check if the power cord is connected to a wall outlet.</li> <li>• Check if there is a problem in the wall outlet by connecting other products.</li> </ul>
The Set-Top Box turns off suddenly.	<ul style="list-style-type: none"> <li>• Check the power control settings. The power supply may be interrupted.</li> </ul>
When connecting to the PC (HDMI/ DVI), 'No signal' or 'Invalid Format' is displayed.	<ul style="list-style-type: none"> <li>• Turn the Set-Top Box off/on using the remote control.</li> <li>• Reconnect the HDMI cable.</li> <li>• Restart the PC with the Set-Top Box on.</li> </ul>

## SPECIFICATIONS

Product specifications may be changed without prior notice due to upgrade of product functions.

MODEL	STB-3000
Dimensions (W x H x D) (mm)	221 x 28.5 x 175.2
Weight (kg)	0.54
Power requirement	19 V --- 2.1 A
AC-DC Adapter	Manufacturer: APD Model: DA-48F19 Manufacturer: Lien Chang Model: LCAP35

Wireless module(LGSBW41) Specifications			
Wireless LAN module		Bluetooth module	
Standard	IEEE 802.11a/b/g/n	Standard	Bluetooth Version 3.0
Frequency range	2400 to 2483.5 MHz 5150 to 5250 MHz 5725 to 5850 MHz (for Non EU)	Frequency range	2400 to 2483.5 MHz
Output power (Max.)	802.11a: 13 dBm 802.11b: 15 dBm 802.11g: 14 dBm 802.11n - 2.4 GHz: 16 dBm 802.11n - 5 GHz: 16 dBm	Output power (Max.)	10 dBm
<ul style="list-style-type: none"> <li>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.</li> <li>This device should be installed and operated with minimum distance 20 cm between the device and your body. And this phrase is for the general statement for consideration of user environment.</li> </ul>			
			

Environment condition	Operating Temperature	0 °C to 40 °C
	Operating Humidity	Less than 80 %
	Storage Temperature	-20 °C to 60 °C
	Storage Humidity	Less than 85 %

	Satellite Digital TV <sup>1</sup>	Digital TV	Analogue TV
Television system	DVB-T/T2 DVB-C DVB-S/S2	DVB-T DVB-C	PAL/SECAM B/G/D/K, PAL I/I', SECAM L/L'
Programme coverage	VHF, UHF C-Band, Ku-Band	VHF, UHF	VHF : E2 to E12, UHF : E21 to E69, CATV: S1 to S20, HYPER: S21 to S47
Maximum number of storable programmes	DVB-S/S2 : 6,000 DVB-T/T2/C & Analogue TV : 1,500		
External antenna impedance	75 Ω		

<sup>1</sup> Satellite and DVB-T2 support models.

#### HDMI-DTV Supported Mode

(Only **HDMI IN 1** and **HDMI IN 2**)

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720 x 480	31.469	59.94
	31.5	60
720 x 576	31.25	50
	15.625	50
1280 x 720	37.500	50
	44.96	59.94
	45	60
1920 x 1080	33.72	59.94
	33.75	60
	28.125	50.00
	26.97	23.97
	27	24
	28.125	25
	33.716	29.976
	33.75	30.00
	56.250	50
	67.43	59.94
	67.5	60

#### HDMI-PC Supported Mode

(Only **HDMI IN 1** and **HDMI IN 2**)

- PC audio not supported.

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640 x 350	31.468	70.09
720 x 400	31.469	70.08
640 x 480	31.469	59.94
800 x 600	37.879	60.31
1024 x 768	48.363	60.00
1152 x 864	54.348	60.053
1280 x 1024	63.981	60.020
1360 x 768	47.712	60.015
1920 x 1080	67.5	60.00

**Photo Format**

File Format	Format	Resolution
.jpeg, .jpg, .jpe	JPEG	Minimum: 64 x 64 Maximum: 15,360 (W) x 8,640 (H) / Progressive Type: 1,920 (W) x 1,440 (H)
.png	PNG	Minimum: 64 x 64 Maximum: 1,920 (W) x 1,080 (H)
.bmp	BMP	Minimum: 64 x 64 Maximum: 1,920 (W) x 1,080 (H)

**Audio Format**

File Format	Item	Info
.mp3	Bit rate	32 Kbps - 320 Kbps
	Sample freq.	16 kHz - 48 kHz
	Support	MPEG1, MPEG2
	Channels	mono, stereo
.wav	Bit rate	-
	Sample freq.	~384 kHz
	Support	PCM
	Channels	mono, stereo
.ogg	Bit rate	64 Kbps - 500 Kbps
	Sample freq.	8 kHz - 48 kHz
	Support	Vorbis
	Channels	mono, stereo
.wma	Bit rate	~1.5 Mbps
	Sample freq.	8 kHz - 192 kHz
	Support	WMA
	Channels	up to 8 ch

- The number of supported programmes may vary depending on the sample frequency.

## Video Codec

Extension	Codec	
.asf .wmv	Video	VC-1 Advanced Profile (WMVA excluded), VC-1 Simple and Main Profiles
	Audio	WMA Standard (WMA v1/WMA Speech excluded), WMA 9 Professional
.divx .avi	Video	DivX3.11, DivX4, DivX5, DivX6, XViD(except 3 warp-point GMC), H.264/AVC, Motion Jpeg, MPEG-4
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, LPCM, ADPCM, DTS
.mp4 .m4v .mov	Video	H.264/AVC, MPEG-4
	Audio	AAC, MPEG-1 Layer III (MP3)
.3gp .3g2	Video	H.264/AVC, MPEG-4
	Audio	AAC, AMR-NB, AMR-WB
.mkv	Video	MPEG-2, MPEG-4, H.264/AVC, VP8
	Audio	Dolby Digital, PCM, DTS, MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), AAC
.ts .trp .tp .mts	Video	H.264/AVC, MPEG-2
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, AAC, PCM
.mpg .mpeg .dat	Video	MPEG-1, MPEG-2
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
.vob	Video	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM
.rm .rmvb	Video	RV30, RV40
	Audio	Realaudio6(cook), AAC LC, HE-AAC
		<ul style="list-style-type: none"> <li>This feature is available in certain countries only.</li> </ul>



Record the model number and serial number of the Set-Top Box.

Refer to the label on the cover and quote this information to your dealer when requiring any service.

MODEL \_\_\_\_\_

SERIAL \_\_\_\_\_

