

**SONY**<sup>®</sup>

Internet TV

# Reference Guide

## WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

The AC power cord must be changed only at a qualified service shop.

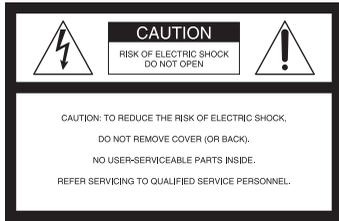
Batteries or batteries installed apparatus shall not be exposed to excessive heat such as sunshine, fire or the like.

## CAUTION

The use of optical instruments with this product will increase eye hazard. As the laser beam used in this Internet TV Box is harmful to eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.



This label is located on the laser protective housing inside the enclosure.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of

sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

These graphical symbols are located on the AC adapter.

## 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.

## Precautions

- To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.
- The set is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the set itself has been turned off.
- Install this unit so that the AC power cord can be unplugged from the wall socket immediately in the event of trouble.
- The nameplate is located on the bottom of the unit.

## Installing

- Do not install this equipment in a confined space, such as a bookshelf or similar unit.

Operation is subject to the following two conditions;

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

## FCC WARNING

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

The shielded Interface cable must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

## FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. This equipment should be installed and operated with at least 20 cm and more between the radiator and person's body (excluding extremities: hands, wrists, feet and ankles).

This device is restricted to indoor use when operated in the 5.15 to 5.25 GHz frequency range.

This product contains FCC ID: GT3FC009

## Owner's Record

The model and serial numbers are located at the bottom of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

## For Customers in the USA

If this product is not working properly, please call 1-800-222-7669.

## Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.

- 14) 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.

## Precautions

### On placement

- Place the unit in a location with adequate ventilation to prevent heat build-up in the unit.
- Do not place the unit on a soft surface such as a rug that might block the ventilation holes.
- Do not place the unit and AC adapter in a location near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.
- Do not place the unit outdoors, in vehicles, on ships, or on other vessels.
- If the unit is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the unit. Should this occur, the unit may not operate properly. In this case, remove the disc and leave the unit turned on for about half an hour until the moisture evaporates.
- Do not install the unit in an inclined position. It is designed to be operated in a horizontal position only.
- Do not place metal objects in front or on the left side of the unit. It may limit reception of radio waves.
- Do not place the unit in a place where medical equipment is in use. It may cause a malfunction of medical instruments.
- If you use a pacemaker or other medical device, consult your physician or the manufacturer of your medical device before using the wireless LAN function.
- Do not place heavy or unstable objects on the unit.
- Do not insert any objects other than discs inside the disc slot. Doing so may cause damage to the unit or the object.
- Take out any discs when you move the unit. If you don't, the disc may be damaged.
- Disconnect the AC power cord and all other cables from the unit when you move the unit.
- During operation the AC adapter has to be placed on a surface with LED side up and label side down.

## On power sources

- Disconnect the unit from the wall outlet if you are not going to use the unit for a long time. To disconnect the AC power cord, grasp the plug itself; never pull the cord.
- Observe following points to prevent the AC power cord being damaged. Do not use the AC power cord if it is damaged, as doing so may result in an electric shock or fire.
  - Do not pinch the AC power cord between the unit and wall, shelf, etc.
  - Do not put anything heavy on the AC power cord or pull on the AC power cord itself.
- Use the supplied AC adapter for the unit, as other AC adapters may cause a malfunction.

## On adjusting volume

Do not turn up the volume while listening to a section with very low level inputs or no audio signals. If you do, your ears and the speakers may be damaged when a peak level section is played.

## On cleaning

Clean the cabinet, panel, and controls with a soft cloth. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzene.

## On cleaning discs, disc/lens cleaners

Do not use cleaning discs or disc/lens cleaners (including wet or spray types). These may cause the apparatus to malfunction.

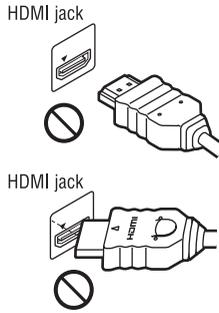
## On replacement of parts

In the events that this unit is repaired, repaired parts may be collected for reuse or recycling purposes.

## On connecting to the HDMI jack

Observe the following as improper handling may damage the HDMI jack and the connector.

- Carefully align the HDMI jack on the rear of the unit and the HDMI connector by checking their shapes. Make sure the connector is not upside down or tilted.



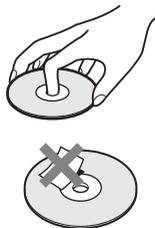
- Be sure to disconnect the HDMI cable when moving the unit.



- Hold the HDMI connector straight when connecting or disconnecting the HDMI cable. Do not twist or force the HDMI connector into the HDMI jack.

## Notes About the Discs

- To keep the disc clean, handle the disc by its edge. Do not touch the surface. Dust, fingerprints, or scratches on the disc may cause it to malfunction.



- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After playing, store the disc in its case.

- Clean the disc with a cleaning cloth. Wipe the disc from the center out.



- Do not use solvents such as benzene, thinner, commercially available disc/lens cleaners, or anti-static spray intended for vinyl LPs.
- If you have printed the disc's label, dry the label before playing.
- Do not use the following discs.
  - A lens cleaning disc.
  - A disc that has a non-standard shape (e.g., card, heart).
  - A disc with a label or sticker on it.
  - A disc that has cellophane tape or sticker adhesive on it.
- Do not resurface the playing side of a disc to remove surface scratches.

## IMPORTANT NOTICE

Caution: This unit is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Plasma display panel televisions and projection televisions are susceptible to this.

If you have any questions or problems concerning your unit, please consult your nearest Sony dealer.

# Specifications

<b>System</b>	
Laser	Semiconductor laser
<b>Input/Output jacks</b>	
HDMI IN	HDMI 19-pin standard connector Video: 480p, 720p, 1080i, 1080p Audio: Linear PCM (2ch: Up to 48kHz)
HDMI OUT	HDMI 19-pin standard connector Video: 720p, 1080i, 1080p, 1080/24p Audio: DTS bitstream, DTS HD Master Audio bit stream, DTS HD High Resolution Audio bit stream, Dolby Digital bitstream, Dolby Digital Plus bit stream, Dolby TrueHD bit stream, Linear PCM (2ch: Up to 192kHz), Linear PCM (6ch: Up to 192kHz), Linear PCM (8ch: Up to 96kHz)
DITIAL AUDIO OUT (OPTICAL)	Optical output jack/-18dBm (wave length 660 nm) PCM/DTS/Dolby Digital optical signal
LAN	1000BASE-T/100BASE-TX/10BASE-T Terminal
USB	USB jack Type A <sup>*1</sup>
IR Blaster	Mini jack (For connecting the IR Blaster cable)
<b>Power and others</b>	
Power requirements	AC adapter: 120 V AC, 1.0 A, 60 Hz (the unit: DC 19.5 V, 2.0 A)
Power consumption	43 W
Dimensions (approx.)	330 mm × 58.5 mm × 249 mm (13.00 in. × 2.31 in. × 9.81 in.) (width/depth/height) incl. projecting parts
Mass (approx.)	2.4 kg (5.3 lb.)
Operating temperature	5 °C to 35 °C (41 °F to 95 °F)
Operating humidity	25% to 80%
<b>Wireless</b>	
Wireless LAN standard	IEEE 802.11a/b/g/n
Frequency range	2.4 GHz band: Channels 1-11 5 GHz band: Channels 36-64, 100-140, 149-165
Modulation	DS-SS Modem and OFDM Modem
<b>Accessories</b>	
Supplied accessories	Keypad (1)/Size AA batteries (2)/AC adapter NSG-AC19V (1)/AC power cord (1)/HDMI cable (1)/IR Blaster cable (1)/Quick Setup Guide (1)/Reference Guide (1)/End User License Agreement (1)/Warranty card (1)

<b>Playable Discs</b>	
Blu-ray Disc <sup>*2*3</sup>	BD-ROM
DVD <sup>*4</sup>	DVD-ROM DVD-R <sup>*5</sup> /DVD-RW <sup>*5</sup> DVD+R/DVD+RW
CD <sup>*4</sup>	CD-DA (Music CD)

<sup>\*1</sup> For details on USB devices that can be connected to the unit, see "Help Guide" (<http://esupport.sony.com/internetv/helpguide>).

<sup>\*2</sup> Since the Blu-ray Disc specifications are new and evolving, some discs may not be playable depending on the disc type and the version.

The audio output differs depending on the source, connected output jack, and selected audio settings.

<sup>\*3</sup> BD-R and BD-RE discs cannot be played.

<sup>\*4</sup> A CD or DVD disc will not play if it has not been correctly finalized. For more information, refer to the operating instructions supplied with the recording device.

<sup>\*5</sup> A DVD-R and DVD-RW disc recorded in VR mode (Video Recording format) cannot be played.

# Additional Information

## Discs that cannot be played

- BDs with cartridge
- BD-Rs/BD-REs
- DVD-RAMs
- HD DVDs
- AVC HD on DVD discs
- DVD Audio discs
- HD layer on Super Audio CDs
- PHOTO CDs
- Data part of CD-Extras
- VCDs/Super VCDs
- Audio material side on DualDiscs
- A disc recorded in a color system other than NTSC, such as PAL (this unit conforms to the NTSC color system).

## Note on Discs

This unit is designed to playback discs that conform to the Compact Disc (CD) standard. DualDiscs and some of the music discs encoded with copyright protection technologies do not conform to the Compact Disc (CD) standard, therefore, these discs may not be playable by this unit.

## Note on playback operations of BDs/DVDs

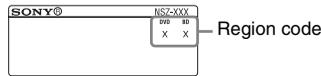
Some playback operations of BDs/DVDs may be intentionally set by software producers. Since this unit plays BDs/DVDs according to the disc contents the software producers designed, some playback features may not be available.

## Note about double-layer BDs/DVDs

The playback pictures and sound may be momentarily interrupted when the layers switch.

## Region code (BD-ROM/DVD VIDEO only)

Your unit has a region code printed on the bottom of the unit and will only play BD-ROMs/DVD-ROMs labeled with identical region codes or .



## About wireless LAN security

Since communication via the wireless LAN function is established by radio waves, the wireless signal may be susceptible to interception. To protect wireless communication, this unit supports various security functions. Be sure to correctly configure the security settings in accordance with your network environment.

## No Security

Although you can easily make settings, anyone can intercept wireless communication or intrude into your wireless network, even without any sophisticated tools. Keep in mind that there is a risk of unauthorized access or interception of data.

## WEP

WEP applies security to communications to prevent outsiders from intercepting communications or intruding into your wireless network. WEP is a legacy security technology that enables older devices, which do not support TKIP/AES, to be connected.

## WPA-PSK (TKIP), WPA2-PSK (TKIP)

TKIP is a security technology developed to correct for the deficiencies of WEP. TKIP assures a higher security level than WEP.

## WPA-PSK (AES), WPA2-PSK (AES)

AES is a security technology that uses an advanced security method that is distinct from WEP and TKIP. AES assures a higher security level than WEP or TKIP.

## Pairing the keypad with the unit

- ① Make sure that the batteries are correctly inserted.
- ② Press the CONNECT button on the unit for two seconds or more to display the pairing screen.
- ③ Hold down the Fn and Enter keys following the instructions on the screen until the pairing screen disappears.

# Trademark Information

- “Blu-ray Disc” and the “Blu-ray Disc” logo are trademarks of Blu-ray Disc Association.
- “DVD+RW,” “DVD-RW,” “DVD+R,” “DVD-R,” “DVD VIDEO,” and “CD” logos are trademarks.
- “AVCHD” and the “AVCHD” logo are trademarks of Panasonic Corporation and Sony Corporation.
- MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.
- Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
- HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.
- Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.
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- Music and video recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information, please visit [www.gracenote.com](http://www.gracenote.com). CD, DVD, Blu-ray Disc, and music and video-related data from Gracenote, Inc., copyright © 2000-present Gracenote. Gracenote Software, copyright © 2000-present Gracenote. One or more patents owned by Gracenote apply to this product and service. See the Gracenote website for a nonexhaustive list of applicable Gracenote patents. Gracenote, CDDB, MusicID, MediaVOCS, the Gracenote logo and logotype, and the “Powered by Gracenote” logo are either registered trademarks or trademarks of Gracenote in the United States and/or other countries.
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- Other system and product names are generally trademarks or registered trademarks of the manufacturers. ™ and ® marks are not indicated in this document.



## For Your Convenience

The Help Guide gives you detailed information on how to use the Internet TV Box as follows:

- Basics of the Internet TV Box
- How to use applications
- Details on how to use the Keypad
- Customizing settings
- Software Updates

### From your Internet TV Box

Select "Help Guide" from the Applications List.

Or, press Q (SEARCH) and type "help" in the Quick Search Box. Help Guide appears in the search results.

- The network connection is required for accessing the "Help Guide" from the unit.

### From a PC browser

Access the following:

<http://esupport.sony.com/internettv/helpguide/>

<http://www.sony.net/>

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