# **ONKYO**

**DOCK MUSIC SYSTEM** 

**SBX-200** 

**Instruction Manual** 



**Thank you** for purchasing an Onkyo product. Please read this manual carefully before making any connections or using this product. By following these instructions, you'll get the best audio performance and the most listening pleasure from your Onkyo product. Keep this manual for future reference.

## **Important Safety Instructions**

#### WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

#### **CAUTION:**

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.











The lightning flash with arrowhead symbol, within an equilateral triangle, 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.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

#### **IMPORTANT SAFETY INSTRUCTIONS**

- 1. Read these instructions.
- 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.
- 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.
- Protect the AC adaptor 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, triend, bracket.

  PORTABLE CART WARNING.
- 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.
- 15. Damage Requiring Service
  Unplug the apparatus from the wall
  - Unplug the apparatus from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - A. When the power-supply cord or plug is damaged,
  - B. If liquid has been spilled, or objects have fallen into the apparatus,
  - C. If the apparatus has been exposed to rain or water,
  - D. If the apparatus does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the apparatus to its normal operation,

- E. If the apparatus has been dropped or damaged in any way, and
- F. When the apparatus exhibits a distinct change in performance this indicates a need for service.
- 16. Object and Liquid Entry

Never push objects of any kind into the apparatus through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.

The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus. Don't put candles or other burning objects on top of this unit.

- 17. Batteries
  - Always consider the environmental issues and follow local regulations when disposing of batteries.
- 18. If you install the apparatus in a built-in installation, such as a bookcase or rack, ensure that there is adequate ventilation. Leave 15 cm of free space at the top and sides and 15 cm at the rear. The rear edge of the shelf or board above the apparatus shall be set 15 cm away from the rear panel or wall, creating a flue-like gap for warm air to escape.

#### **Precautions**

- Recording Copyright—Unless it's for personal use only, recording copyrighted material is illegal without the permission of the copyright holder.
- AC Fuse—The AC fuse inside the unit is not user-serviceable. If you cannot turn on the unit, contact your Onkyo dealer.
- 3. Care—Occasionally you should dust the unit all over with a soft cloth. For stubborn stains, use a soft cloth dampened with a weak solution of mild detergent and water. Dry the unit immediately afterwards with a clean cloth. Don't use abrasive cloths, thinners, alcohol, or other chemical solvents, because they may damage the finish or remove the panel lettering.

# 4. Power WARNING

BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY.

AC outlet voltages vary from country to country. Make sure that the voltage in your area meets the voltage requirements printed on the unit's rear panel (e.g., AC 200-240 V, 50/60 Hz or AC 120 V, 60 Hz). The AC adaptor plug is used to disconnect this unit from the AC power source. Make sure that the plug is readily operable (easily accessible) at all times. Pressing the **ON/STANDBY** button to select Standby mode does not fully disconnect from the mains. If you do not intend to use the unit for an extended period, remove the AC adaptor from the AC outlet.

# 5. Preventing Hearing Loss Caution

Excessive sound pressure from earphones and headphones can cause hearing loss.

# 6. Batteries and Heat Exposure Warning

Batteries (battery pack or batteries installed) shall not be exposed to excessive heat as sunshine, fire or the like.

- 7. Never Touch this Unit with Wet Hands—Never handle this unit or its AC adaptor while your hands are wet or damp. If water or any other liquid gets inside this unit, have it checked by your Onkyo dealer.
- 8. Handling Notes
  - If you need to transport this unit, use the original packaging to pack it how it was when you originally bought it.
  - Do not leave rubber or plastic items on this unit for a long time, because they may leave marks on the case.

- This unit's top and rear panels may get warm after prolonged use. This
  is normal.
- If you do not use this unit for a long time, it may not work properly the next time you turn it on, so be sure to use it occasionally.
- When you've finished using this unit, remove all discs and turn off the power.

#### 9. Installing this Unit

- Install this unit in a well-ventilated location.
- Ensure that there's adequate ventilation all around this unit, especially
  if it's installed in an audio rack. If the ventilation is inadequate, the unit
  may overheat, leading to malfunction.
- Do not expose this unit to direct sunlight or heat sources, because its internal temperature may rise, shortening the life of the optical pickup.
- Avoid damp and dusty places, and places subject to vibrations from loudspeakers.
- Never put the unit on top of, or directly above a loudspeaker.
- Install this unit horizontally. Never use it on its side or on a sloping surface, because it may cause a malfunction.
- If you install this unit near a TV, radio, or VCR, the picture and sound quality may be affected. If this occurs, move this unit away from the TV, radio, or VCR.
- 10. To Obtain a Clear Picture—This unit is a hightech, precision device. If the lens on the optical pickup, or the disc drive mechanism becomes dirty or worn, the picture quality may be affected. To maintain the best picture quality, we recommend regular inspection and maintenance (cleaning or worn part replacement) every 1,000 hours of use depending on the operating environment. Contact your Onkyo dealer for details.

#### 11. Moisture Condensation

#### Moisture condensation may damage this unit.

Read the following carefully:

Moisture may condense on the lens of the optical pickup, one of the most important parts inside this unit.

- Moisture condensation can occur in the following situations:
  - The unit is moved from a cold place to a warm place.
  - A heater is turned on, or cold air from an air conditioner is hitting the unit.
  - In the summer, when this unit is moved from an air conditioned room to a hot and humid place.
  - The unit is used in a humid place.
- Do not use this unit when there's the possibility of moisture condensation occurring. Doing so may damage your discs and certain parts inside this unit.

If condensation does occur, unplug the AC adaptor and leave the unit for two to three hours in the room temperature.

#### For European models



Hereby, ONKYO SOUND & VISION CORPORATION, declares that this SBX-200 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Onkyo does not guarantee Bluetooth compatibility between the SBX-200 system and all Bluetooth-enabled devices.

For compatibility between the SBX-200 system and another device with Bluetooth technology, consult the device's documentation and dealer. In some countries, there may be restrictions on using Bluetooth devices. Check with your local authorities.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Onkyo is under license. Other trademarks and trade names are those of their respective owners.

Please read rating label at the bottom of system for power input and other safety information.

# **Bluetooth**

QDID:B018248

iPad, iPhone, iPod, iPod classic, iPod nano, iPod shuffle, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

"Made for iPod", "Made for iPhone" and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

Please note that the use of this accessory with iPod, iPhone or iPad may affect wireless performance

#### CAUTION

#### - Proper Installation

- Install the system in a place which is level, dry and neither too hot nor too cold. The appropriate temperature is between 5 °C and 35 °C.
- Install the system in a location with adequate ventilation to prevent internal heat from building up inside the unit.
- Leave sufficient distance between the system and TV.
- Keep the system away from TV to avoid interference with TV.

#### CAUTION

#### - Proper Ventilation

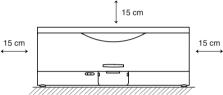
To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:

**Front:** No obstructions and open spacing.

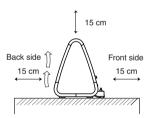
**Sides / Top / Back:** No obstructions should be placed in the areas shown by the dimensions below.

**Bottom:** Place on a flat and stable surface.

#### Front View:



#### Side View:



#### **Contents**

Getting Started	7
Package Contents	7
Using the Remote Control	7
Installing/Replacing the Batteries	7
Connecting the AC Adapter	8
System Overview	8
Front Panel	8
Side Panel	
Remote Control	
Playing back from iPod	10
Setting an iPod on the Unit	10
Listening to an iPod	
Charging an iPod	
Playing Back via Bluetooth	12
Downloading the App	
Listening to an audio from Bluetooth device	
Playing Back from Optional Components	13
Troubleshooting	14
Specification	15

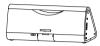
<sup>\*</sup> In this user manual, "iPod" is used as a general reference to functions on an iPod, iPhone or iPad, unless otherwise specied by the text or illustrations.

<sup>\*</sup> In catalogs and on packaging, the letter at the end of the product name indicates the color. Specifications and operations are the same regardless of color.

## **Getting Started**

### **Package Contents**

Examine whether the following package contents are all included:











Main Unit

Remote Control

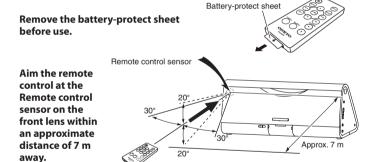
AC Adapter

Power Cord

Cushion for iPad

• A Lithium Coin Battery CR2025 is loaded on the remote control at the factory.

#### **Using the Remote Control**



#### CAUTION

To avoid possible failure, read the following instructions and handle the remote control properly.

- Do not drop or cause impact to the remote control.
- Do not spill water or any liquid on the remote control.
- Do not place the remote control on a wet object.
- Do not place the remote control under the direct sunlight or near sources of excessive heat.

#### **Installing/Replacing the Batteries**

#### CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

- Squeeze and pull to release the battery cover latch. You can remove the battery door with your fingernails by using the spaces set back in wall.
- 2. Match the polarity on the Lithium Cell with a plus sign (+) on the battery tray.
- Slide the tray with new battery into the battery compartment until you hear a click sound.





#### WARNING

- When Using the Battery
- Store the battery in a place where children cannot reach. If a child accidentally swallows the battery, consult a doctor immediately.
- Do not recharge, short circuit, disassemble, heat the battery, or dispose the battery in fire. Doing any of these things may cause the battery to give off heat, crack, or start a fire. Do not leave the battery with other metallic materials. Doing this may cause the battery to give off heat, crack, or start a fire.
- When throwing away or saving the battery, wrap it in tape and insulate; otherwise, the battery may start to give off heat, crack, or start a fire.
- Do not poke the battery with tweezers or similar tools. Doing this may cause the battery to give off heat, crack, or start a fire.
- This product contains a CR Coin Cell Lithium Battery that contains Perchlorate Material, so that special handling may apply.

#### NOTE

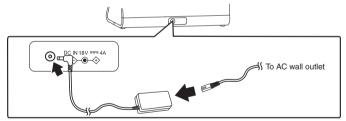
• If you are not going to use the remote control for a long time, remove the battery to avoid any damage that may be caused by leakage and corrosion.

#### **Connecting the AC Adapter**

#### WARNING

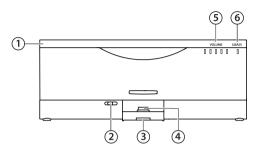
Only use the AC adapter provided with the unit.

- Ensure that power supply outlet matches with the unit AC's input 100-240V. 50/60Hz before connection.
- 1 Insert the AC Adapter into DC IN jack of the unit.
- Insert one end of the Power Cord into the end of the AC Adapter and the other end into an electrical outlet only after all other connections are completed.



# **System Overview**

#### **Front Panel**



#### 1. Handle

#### 2. Docking tray switch (SLIDE TO CLOSE)

Slide the switch to close the docking tray.

#### 3. Source indicator

Lights when one of the sources is selected.

White: iPod mode
Blue: Bluetooth mode
Green: LINE IN mode

#### 4. iPod connector

#### 5. VOLUME indicators

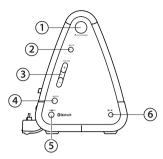
Five level bars will be lighted up/went out one by one when you increase/decrease the volume. Light flashes when the sound is muting.

#### 6. S.BASS indicator

Lights when the super bass is activated.

None: OFF Green: Super bass 1 Orange: Super bass 2

#### **Side Panel**



- 1. (b) ON/STANDBY button
- 2. INPUT button

Toggle among iPod, Bluetooth and LINE IN modes.

3. VOLUME buttons

Hold to increase or decrease the volume.

4. S.BASS button

Activate super bass 1 or super bass 2 sound effect.

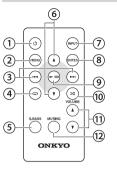
5. PAIRING button

Build a Bluetooth connection with a Bluetooth-enable device.

6. LINE IN jack

For connecting an external audio device with using a stereo mini (not supplied).

#### **Remote Control**



- 1. (On/Standby) button
  Switch between standby mode and power-on mode.
- **2. MENU button** (Only for iPod mode)
  Return to the previous menu in iPod display.
- 3. I◄◄ (Previous)/ ►►I (Next) button
  Skip to the previous/next track in iPod.
  For Fast backward/Fast forward, press
  and hold while playing back.
- **4.**  $\Leftrightarrow$  (Repeat) button (Only for iPod mode) Select to repeat one track or repeat all tracks.
- 5. S.BASS button

Activate the super bass 1 or super bass 2 sound effect.

- ▲ (Up)/ ▼ (Down) button (Only for iPod mode)
   Move the cursor to up or down in iPod mode.
- 7. INPUT button

Switch between the iPod, Bluetooth and LINE IN modes.

- **8. ENTER button** (Only for iPod mode) Confirm a selection in iPod mode.
- P/II (Play/Pause) button
   Play/pause a track when listening to a track.
- **10. □ (Shuffle) button** (Only for iPod mode)

  Select shuffle mode during iPod is playing back.
- 11. VOLUME +/- button

Press to increase (+) or decrease (-) the volume level.

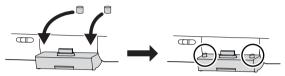
12. MUTING button

Turn off the sound. Press again to restore the sound output. The VOLUME indicators flash when the sound is muting.

# Playing back from iPod

#### NOTE

When you use the iPad, attach the cushion for iPad (included).



Store the cushion in a place where children cannot reach. If a child accidentally swallows the cushion, consult a doctor immediately.

#### Setting an iPod on the Unit

• Compatible iPod/iPhone/iPad models:

Made for:

iPod touch (1st, 2nd, 3rd and 4th generation)

iPod classic,

iPod nano (2nd, 3rd, 4th, 5th and 6th generation)

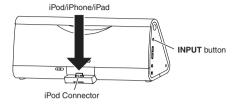
iPhone 4, iPhone 3GS, iPhone 3G, iPhone

iPad 2, iPad

1 Press PUSH TO OPEN on the docking tray at the front of this unit to open.



2 Set your iPod on the tray. Make sure the connector plug of unit is firmly inserted into the connector port of iPod.



#### NOTE

- If the space is left between Docking Tray and setting surface, the damage may be caused due to the excessive force. Open the Docking Tray completely until it stays flat along the setting surface.
- Remove the case or cover from your iPod before setting it in the tray to ensure a stable connection.

#### CAUTION

- Do not lean the unit forward when the docking tray is open.

When the docking tray is not used, you had better close the tray to avoid the damage.

Switch **SLIDE TO CLOSE** to the direction of arrow and close the tray.



#### NOTE

- When placing or removing the iPod, hold the iPod at the same angle as that of the connector on this unit, and do not twist or bend the iPod as connector damage may result.
- Do not carry the unit with an iPod set on the docking tray. Doing so may cause a malfunction.
- When placing or removing the iPod, hold the docking tray securely.
- Before disconnecting the iPod, pause playback.
- If the battery of your iPod is extremely low, charge it for a while before operation.
- An iPod will not work unless it is turned on. Be sure to turn on the power of iPod before operation.

#### Listening to an iPod

- 1 Press the "O" button to turn on the unit.
- Press the INPUT button on the unit or remote control to switch to the iPod mode if the unit is not in the iPod mode.
  - The source indicator turns to white.
- 3 The track starts playing back automatically.

#### **Charging an iPod**

The iPod can be charged through the unit while it is connected to a wall outlet.

- Charging begins when the iPod is set on the docking tray.
- The charging status appears in the display on iPod.
- Make sure the AC adapter is connected to the unit.
- The iPod is charged regardless of the sound source selected on the unit.

 See the iPod instruction manual about the details of iPod charging.

#### NOTE

#### for Caring Your iPod

- Do not touch or hit the iPod terminal pins or the connector pins directly. It might cause damages to the connector part.
- If the iPod does not play correctly, please update your iPod software to the latest version. For details about updating your iPod, check on the Apple web site <a href="http://www.apple.com">http://www.apple.com</a>.
- You may not be able to charge iPod using this unit depending on the type or generations of the iPod.

In such case, turn the unit ON for the proper charging of iPod.

- iPod is a trademark of Apple Inc., registered in the U.S. and other countries.
- iPhone is a trademark of Apple Inc.
- iPad is a trademark of Apple Inc.
- We are not responsible for any loss of or damage to iPod that might result from the use of this product.
- Sound distortion may occur when playing back audio sources with high recording levels. When distortion occurs, it is recommended to turn off the equalizer of the iPod. For information on operating the iPod, see the iPod instruction manual.

# **Playing Back via Bluetooth**

#### **Downloading the App**

We have developed an App to give you full control from your iPad/ iPhone/iPod touch while playing audio over the Bluetooth wireless connection, please download the App for FREE.

• Supported OS version: 4.0 or higher

After you build a Bluetooth connection between your iPad/iPhone/iPod touch and the SBX-200, a prompt will be displayed on your iPad/iPhone/iPod touch.

If you would like to install our App, please install the App in accordance with the contents displayed on the screen. When the installation is finished, you can control the playback from your iPad/iPhone/iPod touch.

#### Listening to an audio from Bluetooth device

#### NOTE

- If your mobile phone supports A2DP protocol, its music will play through the unit.
- You can build a Bluetooth connection with a mobile phone, an iPod or any other Bluetooth-enabled devices.
- 1 Press the "O" button to turn on the unit.
- **Press the INPUT button to switch to Bluetooth mode.** 
  - The source indicator turns to blue.

# 3 Press the PAIRING button on the unit to put the unit into the pairing mode.

- The pair indicator starts blinking at a fast rate.
- If you hold the PAIRING button for more than 2 seconds during the process of pairing, the operation will be cancelled.



# 4 During this period, you can operate the mobile phone, iPod or Bluetooth-enabled device to pair with the unit within a 10m range.

- For details on the Bluetooth connection, refer to the user manual of the Bluetooth-enabled device.
- The unit may not work as normal depending on the circumstance even though the unit is placed within the 10 m range. In such cases, get the Bluetooth-enabled device closer to the unit and retry the operation.
- Once the unit is detected and its name "SBX-200" appears on the display of your Bluetooth-enabled device, select the "SBX-200." If a prompt requests a password, key in the "1234".
  - The pair indicator starts blinking quickly to indicate that the unit and your device have put into the connection mode.
  - When a Bluetooth connection is established successfully, the indicator will be solid on.

# 6 Select the desired music and press "►/II "button on your device. The unit automatically starts playing the audio.

 Try again above steps 2 to 5 if the pair indicator turns solid after blinking for 2 minutes, the pair was unsuccessful.

#### NOTE

If there is no sound output even after the paring is done successfully, consult the user manual of the Bluetooth-enabled device, and then select the "SBX-200" as the audio output device.

#### CAUTION

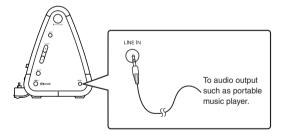
iPod may not output the sound when you press INPUT to change the mode to iPod mode while iPod, already placed on the Docking Tray, is connected to Bluetooth. (The White source indicator turns on.)

In such case, boot the music application on iPod, touch the ightharpoonup mark on the screen, and select "Dock Connector" to output the sound properly.

# **Playing Back from Optional Components**

You can enjoy the sound from an optional component such as a portable music player through the speakers of this unit. Be sure to turn off the power of each component before making any connections. For details, refer to the instruction manual of the component to be connected.

- 1 Connect the LINE IN jack on the side of the unit to the line output jack of an external component using an audio connecting cable (not supplied).
- 2 Turn the connected component on.
- 3 Press "也" button to turn on the unit.
- Press INPUT button repeatedly to switch LINE IN mode. The sound from the connected component is output from the speakers of this unit.
  - The source indicator turns to Green.



# **Troubleshooting**

#### The unit does not work.

- Press Reset button which is placed inside the Reset engraved thin hole on the bottom of this unit using such as a slender rod.
- Reset button Bottom of unit
- Unplug the Power Cord from the
  - wall outlet, wait 10 seconds or more, then plug it in again.
- Press the INPUT button repeatedly to switch LINE IN mode (the source indicator lit Green), and press and hold the  $\Leftrightarrow$  (Repeat) button on the remote control during the power is ON.

#### The unit is suddenly powered off.

- The unit has an energy saving function. The unit automatically enters the standby mode in the following situations.
  - No sound output and without any operation for more than 10 minutes in the iPod mode or Bluetooth mode.
  - No signal input for more than 10 minutes in the LINE IN mode. In such cases, turn ON the unit again and play back the audio.

#### The power does not come on.

• Make sure the Power Cord is connected to the wall outlet firmly. (P.8)

#### The buttons on the unit do not function.

• Remove and reconnect the AC adapter and turn on the unit again. (P.8)

#### There is no sound output.

- Check if the volume of the iPod/external device connected to the unit is set to the minimum.
- Make sure the sound is not muted. (P.9)
- Adjust the VOLUME +/- buttons on the remote control or unit. (P.9)

#### There is no audio from iPod.

• Make sure the iPod is connected firmly. (P.10, 11)

#### iPod operation is not performed.

- Make sure the iPod is connected firmly. (P.10, 11)
- Restart the iPod

#### The iPod cannot be charged.

- Make sure the iPod is connected firmly. (P.10, 11)
- Make sure the Power Cord is connected to the wall outlet firmly. (P.8)

#### Bluetooth connection cannot be built.

• When building a Bluetooth connection between the unit and your device for the first time, if the connection is fail, you need to power off your device and power on again to clear the device name, and build the connection again. (P.12, 13)

#### The Docking Tray cannot be closed.

• Switch the SLIDE TO CLOSE to direction of arrow. (P.10)

#### The remote control does not function.

- Make sure the battery is inserted correctly. (P.7)
- Replace the battery in the remote control with a new one if it is weak. (P.7)
- Move closer to the unit when using the remote control. (P.7)

# **Specification**

#### **■**General

Rated output Power (IEC):  $2ch \times 20 W$  at 6 ohms, 1kHz, 2chDriven of 1 %.

Power Supply: AC 100 – 240 V, 50/60 Hz

Power Consumption: 27 W

**No-sound Power** 

Consumption: 4.8 W

Stand-by Power

Consumption: 0.3 W

Dimensions:  $450 \text{ mm (W)} \times 176 \text{ mm (H)} \times 131 \text{ mm (D)}$ 

Weight: 3.5 Kg Analogue Input: LINE

■ Amplifier

**Total Harmonic** 

 $\begin{array}{ll} \mbox{Distortion+N:} & 0.5 \% \mbox{ (1 kHz 1 W)} \\ \mbox{Damping Factor:} & 15 \mbox{ (Front, 1 kHz, 8 $\Omega$)} \end{array}$ 

Input Sensitivity/

Impedance:  $1000 \text{ mV} / 47 \text{ k}\Omega$  (LINE) Frequency Response: 40 Hz to 20 kHz/+3 dB, -3 dB

Tone Control Characteristies: +4 dB, 80 Hz (S. BASS 1) +8 dB, 80 Hz (S. BASS 2)

Signal to Noise Ratio: 76 dB (LINE, IHF-A)

 $\blacksquare \, \mathsf{Speakers} \,$ 

Speaker Impedance:  $6 \Omega$ 

Speaker Outputs: Internal speaker 2 ch Type: Full-range Bass-Reflex

Unit: 10.5 cm cone

#### **■**Bluetooth

Version: 2.1 + EDR

Profile: A2DP 1.2, AVRCP 1.0

Design and specifications are subject to change without notice.

# ONKYO

#### ONKYO SOUND & VISION CORPORATION

2-1, Nisshin-cho, Neyagawa-shi, OSAKA 572-8540, JAPAN Tel: 072-831-8023 Fax: 072-831-8163

http://www.onkyo.com/

#### ONKYO U.S.A. CORPORATION

18 Park Way, Upper Saddle River, N.J. 07458, U.S.A. Tel: 800-229-1687, 201-785-2600 Fax: 201-785-2650 http://www.us.onkyo.com/

#### ONKYO EUROPE ELECTRONICS GMbH

Liegnitzerstrasse 6, 82194 Groebenzell, GERMANY

Tel: +49-8142-4401-0 Fax: +49-8142-4401-555

http://www.eu.onkyo.com/

#### ONKYO EUROPE ELECTRONICS GmbH (UK BRANCH)

The Coach House 81A High Street, Marlow, Buckinghamshire, SL7 1AB, UK

Tel: +44-(0)1628-473-350 Fax: +44-(0)1628-401-700

#### **ONKYO CHINA LIMITED**

Unit 1 & 12, 9/F, Ever Gain Plaza Tower 1, 88, Container Port Road, Kwai Chung, N.T., Hong Kong. Tel: 852-2429-3118 Fax: 852-2428-9039 http://www.onkyochina.com/

#### ONKYO CHINA PRC

1301, 555 Tower, No.555 West NanJin Road, Jin an, Shanghai, China 200041, Tel: 86-21-52131366 Fax: 86-21-52130396

#### SN 29401095

(C) Copyright 2011 ONKYO SOUND & VISION CORPORATION Japan. All rights reserved.

D1110-0

