

# Personal Audio System

## Operating Instructions



ICF-CS20BT

### English Personal Audio System

Before operating the system, please read this guide thoroughly and retain it for future reference.

#### Owner's Record

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

Model No. ICF-CS20BT

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

#### WARNING

##### DO NOT INGEST BATTERY. CHEMICAL BURN HAZARD

This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.

Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

This graphical symbol is located on the bottom of the unit.

**For customers in the USA:**  
Please register this product on line at <http://www.sony.com/productregistration>.

**For Customers in Canada:**  
Please register this product online at <http://productregistration.sony.ca>. Proper registration will enable us to send you periodic updates about new products, services and other important announcements. Registering your product will also allow us to contact you in the unlikely event that the product needs adjustment or modification. Thank you.

#### WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

As the main plug is used to disconnect the unit from the mains, connect the system to an easily accessible AC outlet. Should you notice an abnormality in the system, disconnect the main plug from the AC outlet immediately.

The system is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the system itself has been turned off.

Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire.

**On Copyrights and Licenses**  
The "BLUETOOTH" word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Sony Corporation is under license.

The N Mark is a trademark or registered trademark of NFC Forum, Inc. in the United States and in other countries.

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

Lightning is a trademark of Apple Inc. "Made for iPod," and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, 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 or iPhone may affect wireless performance.

No Power No Problem is a trademark of Sony Corporation. Auto Time Set is a trademark of Sony Corporation. Other trademarks and trade names are those of their respective owners.

- Notes**
- This system is not specified for use with an iPad via USB connection, and malfunction may result if used with one.
  - In the Operating Instructions, "iPod" is used as a general reference to functions on an iPhone, iPod or iPod, unless otherwise specified by the text or illustrations.

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

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

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

**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.

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

The following FCC/IC statement applies only to the version of this model manufactured for sale in the U.S.A. and Canada. Other versions may not comply with FCC/IC technical regulations. This equipment complies with FCC/IC radiation exposure limits set forth by an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) exposure rules. This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20 cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

**For customers in Canada**  
This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

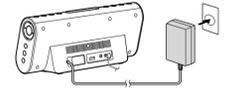
#### Important Safety Instructions

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

## ▶ Getting Started

### Connecting to a Power Source

- Plug the AC plug into a wall outlet firmly.



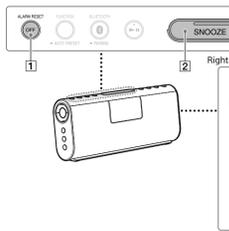
**About the battery as a backup power source**  
This system contains a CR2032 battery as a backup power source to keep the clock and the alarm operating during a power interruption. (No Power No Problem system)

### CAUTION

**When to replace the battery**  
When the battery becomes weak, "ST" lights up in the display. If a power interruption occurs while the battery is weak, the current time and alarm will be erased. Replace the battery with a Sony CR2032 lithium battery. Use of another battery may cause a fire or explosion. To replace the battery, see "Replacing the Battery" for details.

**Note**  
• If "AM 12:00" flashes in the display when the system is connected to an AC outlet for the first time, the battery may be weak. In this case, consult your nearest Sony dealer.

### Setting the Clock



- 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 power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- 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.

- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 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.
- Use only the service personnel who have been trained and authorized by the manufacturer.

**For the state of California USA only**  
Perchlorate Material—special handling may apply, see [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate)

### Precautions

**Note when using with a mobile phone**  
• For details on operation of your mobile phone when receiving a telephone call while transmitting the sound using the BLUETOOTH connection, refer to the operating instructions supplied with the mobile phone.

**On safety**  
The nameplate indicating Sony trademark, model number and electrical rating is located on the bottom exterior of this system.

**Notes on the AC plug**  
• Plug the AC plug into a nearby wall outlet (mains). In the case of a problem, unplug it from the wall outlet (mains) immediately.  
• Do not twist or place heavy objects on the AC plug cord.  
• Do not disconnect AC power, grasp the plug itself, nor the cord.

**On placement**  
• Do not set the speaker in an inclined position.  
• Do not leave the system in a location near heat sources, or in a place subject to direct sunlight, excessive dust, moisture, rain or mechanical shock.  
• Do not expose the battery to excessive heat such as direct sunlight, fire or the like.

**On operation**  
• Do not insert any small objects, etc., into the jacks. The system may short out or malfunction.

**On cleaning**  
• Do not use alcohol, benzene, or thinner to clean the cabinet.

**Others**  
• If you have any questions or problems concerning this system that are not covered in this manual, please consult your nearest Sony dealer.

**FOR UNITED STATES CUSTOMERS. NOT APPLICABLE IN CANADA, INCLUDING IN THE PROVINCE OF QUEBEC.**

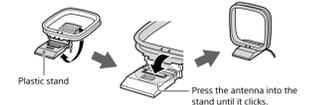
This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The Caution Marking is put on the Bottom Enclosure.

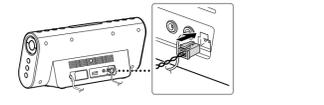
## Connecting the AM Loop Antenna

The shape and length of the antenna is designed to receive AM signals. Do not dismantle or roll up the antenna.

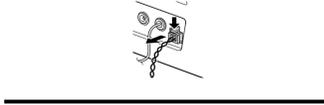
- Raise the plastic stand and fit the antenna into the slot of the stand.



- Insert the AM antenna connector in the AM ANTENNA jack on the rear of the system.



**To remove the AM loop antenna**  
Push and hold down the tab of the antenna terminal clamp, and remove the AM loop antenna.



## How to Make Wireless Connection with BLUETOOTH Devices

You can enjoy music and hands-free calling with the system wirelessly using your device's BLUETOOTH function. Choose one of the following three connection methods, best suited for the BLUETOOTH device. For details on how to operate your device, refer to the operating instructions supplied with the device.

**Pairing with a BLUETOOTH device:** see **Pattern A**  
BLUETOOTH devices need to be "paired" with each other beforehand.

**Connecting with a paired device:** see **Pattern B**  
To listen to music with a BLUETOOTH device that has been paired, see this pattern.

**One-touch connection with a smartphone (NFC):** see **Pattern C**  
Using an NFC compatible smartphone, you can establish BLUETOOTH connection by just touching the system with it.

**For details about NFC, see "About NFC" in Pattern C.**

Check the following before operating the system.  
• Both the system and the device are placed within 1 m (3 ft) of each other.  
• The system is connected to a power source.  
• The operating instructions supplied with the device are kept at hand.

### Pattern A

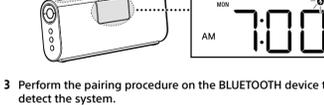
**Pairing and connecting with a BLUETOOTH device**

- Set the BLUETOOTH function of the BLUETOOTH device to ON.

For details, refer to the operating instructions supplied with the device.

- Press and hold **BLUETOOTH** + **PAIRING** [8] on the system until beeps are heard and **BLUETOOTH** begins to flash quickly in the display.

**Tip**  
• From the factory, pairing information is not stored in the system. In this case, if you only press **BLUETOOTH** + **PAIRING** [8], **BLUETOOTH** starts flashing quickly in the display.



- Perform the pairing procedure on the BLUETOOTH device to connect the system.

If "SONY: ICF-CS20BT" does not appear on the device's display, repeat from step 1.

**Note**  
• Some devices cannot display a list of detected devices.

- Select "SONY: ICF-CS20BT" shown in the display of the BLUETOOTH device.

**Tip**  
• To pair with other BLUETOOTH devices, repeat steps 1 to 5 for each device.

**Notes**  
• Pairing mode of the system is canceled after about 5 minutes, and **BLUETOOTH** in the display flashes slowly. If the pairing mode is canceled while performing this procedure, start over from step 2.  
• Passcode of the system is fixed as "0000." The system cannot be paired with a BLUETOOTH device whose Passcode is not "0000."

• Once BLUETOOTH devices are paired, there is no need to pair those devices again. However, in the following cases, you will need to perform the pairing procedure again.  
— Pairing information is deleted after repair, etc.  
— The system is paired with 5 or more devices.

The system can be paired with up to 4 BLUETOOTH devices. If a new device is paired after 4 devices have been paired, the device whose latest connection time is the oldest among the 4 paired devices is replaced by the new one.

• More than one device can be paired with the system, but sound will be heard from just one of those devices.

### Pattern B

**Connecting with a paired BLUETOOTH device**

- Set the BLUETOOTH function of the BLUETOOTH device to ON.

**Tips**  
• When **BLUETOOTH** [8] is pressed, the system tries to establish BLUETOOTH connection with the BLUETOOTH device connected to the system last time. The BLUETOOTH connection is established and **BLUETOOTH** in the display stays on.

• When **BLUETOOTH** lights up in the display, the system is connected to a BLUETOOTH device. When you want to connect another BLUETOOTH device, terminate the current BLUETOOTH connection first by operating the connected BLUETOOTH device.

- Select "SONY: ICF-CS20BT" shown in the display of the BLUETOOTH device.

If necessary, select a BLUETOOTH profile that the system supports from the following: A2DP, HSP or HFP. For details on each profile, see "Listening to Music by BLUETOOTH Connection with a Smartphone, etc." or "Using Hands-free Calling While Listening to Music."

**Note**  
• This step may not be necessary for some devices.  
The BLUETOOTH connection is established and **BLUETOOTH** in the display stays on.

### Pattern C

**Connecting with a smartphone by One touch (NFC)**

By just touching the system with an NFC compatible smartphone, the system pairs and connects with the smartphone. (After making the BLUETOOTH connection, the system switches to the BLUETOOTH function automatically.)

**Compatible smartphones**  
• Smartphones with the NFC function built-in (OS: Android 2.3.3 or later, excluding Android 3.x) Customers in the U.S.A.  
Access the following Web site for details: <http://esupport.sony.com/US>

• Customers in Canada (Advanced Audio Distribution Profile): enables you to enjoy high-quality audio content wirelessly.  
• AVRCP (Audio Video Remote Control Profile): enables you to enjoy basic remote control operation (play, stop, etc.) of a BLUETOOTH device.

**About NFC**  
NFC (Near Field Communication) is a technology enabling short-range wireless communication between various devices, such as mobile phones and IC tags. Thanks to the NFC function, data communication can be achieved easily just by touching the relevant symbol or designated location on NFC compatible devices.

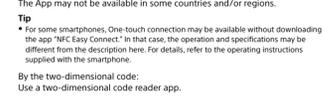
- Set the NFC function of the smartphone to on. For details, refer to the operating instructions supplied with the smartphone.  
• If your smartphone OS is Android 2.3.3 or later, and less than Android 4.1: proceed to step 2.  
• If your smartphone OS is Android 4.1 or later: proceed to step 4.

- Download and install the app "NFC Easy Connect" on the smartphone.  
"NFC Easy Connect" is an original app by Sony for Android phones, and is available at Google Play Store.

Search for "NFC Easy Connect" or scan the following two-dimensional code to download and install the free app. Communication fees are required to download the app. The app may not be available in some countries and/or regions.

**Tip**  
• For some smartphones, One-touch connection may be available without downloading the app "NFC Easy Connect." In that case, the operation and specifications may be different from the description here. For details, refer to the operating instructions supplied with the smartphone.

By the two-dimensional code: Use a two-dimensional code reader app.

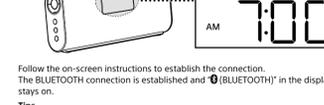


- Start the app "NFC Easy Connect" on the smartphone. Make sure that the application screen is displayed.

- Touch the system with the smartphone. Keep touching the smartphone on the N marked part of the system until the smartphone responds.

**Note**  
• If the screen of your smartphone is locked, the smartphone will not function. In this case, release the lock, then touch the smartphone on the N marked part again.

Smartphone responds (system recognized)



Follow the on-screen instructions to establish the connection. The BLUETOOTH connection is established and **BLUETOOTH** in the display stays on.

**Tips**  
• If it is difficult to establish the connection, try the following.  
— Activate the app "NFC Easy Connect" and move the smartphone slightly on the N marked part of the system.  
— If the smartphone is in a case, remove it.  
• Touch the system with the smartphone again to disconnect.

• If you have multiple NFC compatible devices, just touch the smartphone to a different device to switch the connection to that device. For example, when your smartphone is connected with NFC compatible headphones, just touch the smartphone to the system to change the BLUETOOTH connection to the system.

### Indications of the BLUETOOTH function

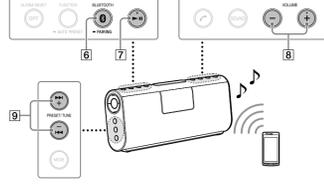


Status	Display
BLUETOOTH function	"BLUETOOTH" lights up
Pairing with a device	"BLUETOOTH" flashes quickly
Searching for a device	"BLUETOOTH" flashes
Connected to a device	"BLUETOOTH" lights up

## ▶ Listening to Music

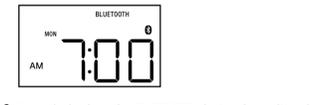
### Listening to Music by BLUETOOTH Connection with a Smartphone, etc.

You can enjoy listening to music and basic remote control operation of a BLUETOOTH device via BLUETOOTH connection. The BLUETOOTH device is required to support the following BLUETOOTH profiles.  
• A2DP (Advanced Audio Distribution Profile): enables you to enjoy high-quality audio content wirelessly.  
• AVRCP (Audio Video Remote Control Profile): enables you to enjoy basic remote control operation (play, stop, etc.) of a BLUETOOTH device.



Operations may vary depending on the BLUETOOTH device. Refer also to the operating instructions supplied with your BLUETOOTH device.

- Make the BLUETOOTH connection between the system and the device. For details on the BLUETOOTH connection procedure, see "How to Make Wireless Connection with BLUETOOTH Devices." The BLUETOOTH connection is established and **BLUETOOTH** in the display stays on.



- Start playback on the BLUETOOTH device, then adjust the volume. Set the volume of the BLUETOOTH device to a moderate level, and press **VOLUME** +/- [8] on the system.

**After use**  
Do any of the following to terminate the BLUETOOTH connection.  
• Set the BLUETOOTH function of the BLUETOOTH device to off. For details, refer to the operating instructions supplied with the device.  
• Turn off the BLUETOOTH device.  
• Touch the system with the smartphone again to disconnect (NFC compatible smartphones only).

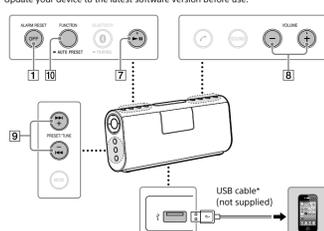
**System button functions during music playback**  
You can operate a BLUETOOTH device that supports AVRCP. Available functions may vary depending on the BLUETOOTH device. Refer to the operating instructions supplied with the BLUETOOTH device.

Buttons	Functions
<b>PH</b> (play/pause) [7]	Press once to pause/resume playback.
<b>FF</b> (forward) [9] / <b>REW</b> (rewind) [9]	Press once to skip to the next/previous track.
<b>VOLUME</b> +/- [8]	Press to adjust the volume.

## Listening to Music by Wired Connection

### Listening to Music via USB Connection with an iPhone/iPod

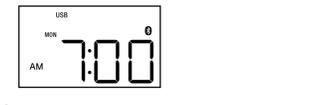
You can enjoy listening to music and play back an iPhone/iPod connected to the system via USB. Update your system to the latest software version before use.



• USB port on the rear of the system  
• USB Cable: Use the Lightning to USB Cable or Dock Connector to USB Cable supplied with your iPhone/iPod.

- Connect the iPhone/iPod to the  $\Psi$  (USB) port on the rear of the system.

- Press **FUNCTION** [10] to select "USB." Press **FUNCTION** [10] repeatedly until "USB" lights up in the display.



- Start playback on the connected iPhone/iPod, then adjust the volume. Set the volume of the connected iPhone/iPod to a moderate level, and press the **VOLUME** +/- [8] on the system.

**Notes**  
• When a USB device other than an iPhone/iPod is connected to the system, only charging begins automatically.  
• Do not connect the multiple devices to the  $\Psi$  (USB) port of the system.

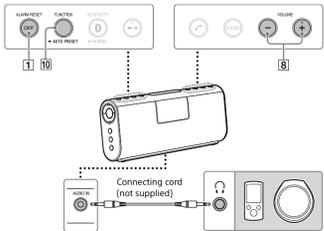
**After use**  
Press **FUNCTION** [10] or **OFF** [1] to deactivate the USB function.

**System button functions during music playback**

Buttons	Functions
<b>PH</b> (play/pause) [7]	Press once to pause/resume playback.
<b>FF</b> (forward) [9] / <b>REW</b> (rewind) [9]	Press once to skip to the next/previous track. Press and hold to fast-forward/fast-rewind.
<b>VOLUME</b> +/- [8]	Press to adjust the volume.

## ▶ Listening to Music by Wired Connection with a Portable Audio Device, etc.

You can enjoy sound from the external device, such as a portable digital music player, through the speaker of this system. Be sure to turn off the power of the device before making any connections.



**AUDIO IN** jack (stereo mini jack) on the rear of the system

- Connect the device to the **AUDIO IN** jack on the rear of the system.

- Press **FUNCTION** [10] to select "AUDIO IN." Press **FUNCTION** [10] repeatedly until "AUDIO IN" lights up in the display.

- Start playback on the connected device, then adjust the volume. Set the volume of the connected device to a moderate level, and press the **VOLUME** +/- [8] on the system.

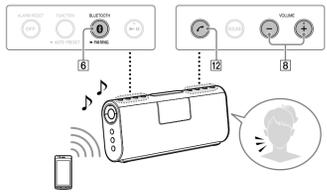
**After use**  
Press **FUNCTION** [10] or **OFF** [1] to deactivate the AUDIO IN function. To stop playback on the connected device, operate the connected device.

**Notes when connecting the device by wired connection**  
• The necessary type of cable or connecting cord depends on the device. Be sure to use the correct type of cable or cord.  
• When you watching TV or listening to the radio with a device connected to the system, the reception may be poor.  
• When you listen to the radio with a device connected, turn off the connected device to prevent noise. If noise occurs, even when the device is turned off, disconnect and place the device away from the system.

## ► Useful Functions

### Using Hands-free Calling While Listening to Music

You can enjoy hands-free calling via BLUETOOTH connection with a BLUETOOTH mobile phone that has a music function and supports the BLUETOOTH profile A2DP (Advanced Audio Distribution Profile), and HFP (Hands-free Profile) or HSP (Headset Profile). If your BLUETOOTH mobile phone supports both HFP and HSP, set to HFP.



Operations may vary depending on the BLUETOOTH mobile phone. Refer also to the operating instructions supplied with your mobile phone.

#### 1 Make the BLUETOOTH connection between the system and the mobile phone.

For details on the BLUETOOTH connection procedure, see "How to Make Wireless Connection with BLUETOOTH Devices." The BLUETOOTH connection is established and **0** (BLUETOOTH) in the display starts on.

#### 2 Start playback on the BLUETOOTH mobile phone, then adjust the volume.

Set the volume of the BLUETOOTH mobile phone to a moderate level, and press **VOLUME +/-** (**8**) on the system. When the BLUETOOTH device is connected to the system (**0** BLUETOOTH) is lit), you can use hands-free calling even if the BLUETOOTH function is not activated.

When there is an incoming call or outgoing call, the system automatically changes to the BLUETOOTH function.

#### To call

Operate the BLUETOOTH mobile phone. Check that a dialing tone is heard on the system and talk into the system. If no dialing tone is heard, press **CALL** (**9**) on the system for about 2 seconds to change the call to the system.

#### To receive a call

When an incoming call arrives, the playback or radio pauses and a ring tone is heard from the system. Press **CALL** (**9**) on the system and talk into the system.

- Tips**
- No ring tone is heard from the system when an incoming call arrives, stop playback or radio and press **CALL** (**9**) to talk.
  - You can use the hands-free calling when playback is completed.
  - During a call, press **VOLUME +/-** (**8**) on the system to adjust the volume. The volume of a call and that of a playback are set separately.

- Note**
- When using a mobile phone, keep it 50 cm or more away from the system. If they are too close together, noise may be heard.

#### To end a call

Press **CALL** (**9**). If you were listening to music with any function when the call arrived, music will be resumed when the call has finished.

#### After use

- Do any of the following to terminate the BLUETOOTH connection.
- Set the BLUETOOTH function of the BLUETOOTH device to off. For details, refer to the operating instructions supplied with the device.
- Turn off the BLUETOOTH device.
- Touch the system with the smartphone again to disconnect (NFC compatible smartphones only).

#### System button functions during a call

Available functions may vary depending on the BLUETOOTH mobile phone, or the profiles supported by the BLUETOOTH mobile phone. Refer to the operating instructions supplied with the BLUETOOTH mobile phone.

Status	<b>CALL</b> ( <b>9</b> )
Standby	<ul style="list-style-type: none"> <li>• Press once to start voice dial (voice dial compatible mobile phones only).</li> <li>• Press and hold for a few seconds to redial the phone number that is dialed last time.</li> </ul>
Outgoing call	<ul style="list-style-type: none"> <li>• Press once to cancel outgoing call.</li> <li>• Press and hold for a few seconds to change call device between the system and mobile phone.</li> </ul>
Incoming call	<ul style="list-style-type: none"> <li>• Press once to answer call.</li> <li>• Press and hold for a few seconds to reject call.</li> </ul>
During call	<ul style="list-style-type: none"> <li>• Press once to finish call.</li> <li>• Press and hold for a few seconds to change call device between the system and mobile phone.</li> </ul>

### Using Hands-free Calling with Another BLUETOOTH Mobile Phone While Listening to Music

You can enjoy hands-free calling with another BLUETOOTH mobile phone while listening to music with a BLUETOOTH music player.

- One-touch connection (NFC) cannot be used in this procedure.
- Operations may vary depending on the BLUETOOTH device. This type of BLUETOOTH connection may not be established depending on the combination of the BLUETOOTH devices. Refer also to the operating instructions supplied with your BLUETOOTH devices.

#### 1 Make the BLUETOOTH connections between the system and a BLUETOOTH music player via A2DP, and between the system and a BLUETOOTH mobile phone via HFP or HSP.

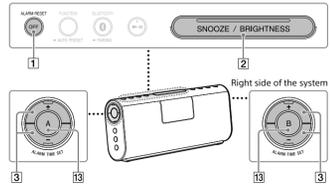
For details on the BLUETOOTH connection procedure, see "How to Make Wireless Connection with BLUETOOTH Devices." The BLUETOOTH connection is established and **0** (BLUETOOTH) in the display stays on.

- Tips**
- To use only the calling function of a BLUETOOTH mobile phone that also has a music function, establish BLUETOOTH connection between the system and the mobile phone via HFP or HSP, not via A2DP.
  - Depending on the BLUETOOTH mobile phone, while the BLUETOOTH connection is established via HFP or HSP, the BLUETOOTH connection via A2DP may also be occupied by the same BLUETOOTH mobile phone. A BLUETOOTH music player cannot be connected with this system in this case.

- Note**
- To make the same connection with the same devices after turning the system off, follow this procedure again.

## Setting the Alarm

- You can set the alarm mode from the following.
  - **"FM," "AM"**: Set the radio alarm.
  - **"USB"**: Set the alarm to sound from an iPhone/iPod via USB connection.
  - **"BLUETOOTH"**: Set the alarm to sound from a BLUETOOTH device, such as smartphone, iPod, etc., via BLUETOOTH connection.
  - **"BUZZER"**: Set the buzzer alarm.
- Set the clock to the current time before setting the alarm, so that the alarm will sound at the correct time. (See "Setting the clock for the first time.")



You can set alarm A and B. To set the alarm A, use **A** (**13**) and **ALARM TIME SET +/-** (**3**). To set alarm B, use **B** (**13**) and **ALARM TIME SET +/-** (**3**). The following explains how to set the alarm A.

#### 1 Press and hold **A** (**13**) until the hour begins to flash in the display.

- **0** and "WAKE UP" light up and the hour flashes in the display.



#### 2 Press **ALARM TIME SET +/-** (**3**) to select the following setting items, then press **A** (**13**) to confirm.

- **ALARM TIME SET +/-** (**3**): the currently selected item begins to flash.
- **Hour, minute**: Press and hold **ALARM TIME SET +/-** (**3**) to change the hour and minute digits quickly.
- **Days of the week**: Select one of the following three types.
  - Every day: "MON TUE WED THU FRI SAT SUN"
  - Week day: "MON TUE WED THU FRI"
  - Weekend: "SAT SUN"

#### 3 Press **ALARM TIME SET +/-** (**3**) to select the alarm mode, then press **A** (**13**) to confirm.

- Select one of the following.
  - **"FM," "AM"**: Set the radio alarm. Proceed to step 4.
  - **"USB"**: Set the alarm to sound from an iPhone/iPod via USB connection. Skip step 4, and proceed to step 5.
  - **"BLUETOOTH"**: Set the alarm to sound from a BLUETOOTH device, such as smartphone, iPod, etc., via BLUETOOTH connection. Skip step 4, and proceed to step 5.
  - **"BUZZER"**: Set the buzzer alarm. The alarm setting is completed. The display returns to clock and **0** lights up in the display. You do not need to do step 4 or later.

#### 4 Press **ALARM TIME SET +/-** (**3**) to select the radio station, then press **A** (**13**) to confirm.

Select the desired preset number or "-", "+", "-" is the last station you listened to.

#### 5 Press **ALARM TIME SET +/-** (**3**) to adjust the volume, then press **A** (**13**) to confirm.

The alarm setting is completed. The display returns to clock and **0** lights up in the display.

#### 6 When "USB" or "BLUETOOTH" is selected as the alarm mode, connect an iPhone/iPod via USB or a BLUETOOTH device before the alarm sounds.

If the system does not connect to the BLUETOOTH device, at the alarm time, the system tries to establish BLUETOOTH connection with the BLUETOOTH device connected to the system last time. If the system cannot connect to the BLUETOOTH device, or does not connect to an iPhone/iPod via USB, the alarm will be the buzzer. If you set "USB" as the alarm mode, and a smartphone is connected via USB, the alarm will be the buzzer.

#### To stop the alarm

Press **ALARM RESET** (**1**) to turn off the alarm. The alarm will sound again at the same time the next day.

#### To doze for a few more minutes - Snooze function

##### 1 Press **SNOOZE** (**2**) once while the alarm sounds.

The alarm sound turns off but will automatically come on again after about 10 minutes. You can change the snooze time as follows by pressing **SNOOZE** (**2**) repeatedly.



To stop the snooze timer, press **ALARM RESET** (**1**).

#### System button functions for the alarm function

To	Do this
Confirm an alarm time setting	Press <b>ALARM TIME SET +/-</b> ( <b>3</b> ). The setting will be displayed for about 4 seconds.
Change an alarm time setting	<ol style="list-style-type: none"> <li>1 Press and hold <b>ALARM TIME SET +/-</b> (<b>3</b>) until the alarm time digits begin to change in the display. You can change the alarm time step by step by pressing <b>ALARM TIME SET +/-</b> (<b>3</b>) repeatedly.</li> <li>2 Release <b>ALARM TIME SET +/-</b> (<b>3</b>) when the desired alarm time is displayed.</li> </ol>
Turn off the alarm sound once	Press <b>SNOOZE</b> ( <b>2</b> ) once while the alarm sounds.
Stop the alarm	Press <b>ALARM RESET</b> ( <b>1</b> ).
Deactivate the alarm	Press <b>A</b> ( <b>13</b> ) again. <b>0</b> turns off in the display, and the alarm function is deactivated. To activate the alarm again, press <b>A</b> ( <b>13</b> ) again.

- Tip**
- Even if the alarm is deactivated, the alarm will be activated when you change the alarm setting.

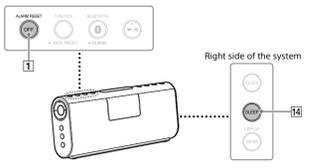
- Notes**
- When "USB" or "BLUETOOTH" is selected as the alarm mode, only the buzzer alarm will sound if an iPhone/iPod is not connected via USB, or a BLUETOOTH device is not connected, or music is not stored in the device, or the device is turned off.
  - When Auto DST (summer time adjustment) is set, the alarm sounds as follows:
    - If the alarm is set between 2:00 AM and 3:00 AM, and daylight saving time begins, the alarm will sound at 3:00 AM.
    - If the alarm is set between 1:00 AM and 2:00 AM, and daylight saving time ends, the alarm will sound twice.
  - The volume of the buzzer is not adjustable.
  - If the same alarm time is set for both alarm A and B, alarm A takes priority.
  - If no operation is performed while the alarm is sounding, the alarm will stop after about 60 minutes.

#### Notes on the alarm in the event of a power interruption

- In the event of a power interruption, the buzzer alarm will last about 5 minutes if the battery is not weak. However, certain functions will be affected as follows:
  - The backlight will not light up.
  - If the alarm mode is set to "USB," "BLUETOOTH," "FM" or "AM," it will change to buzzer automatically.
  - **ALARM RESET** (**1**) is not pressed, the alarm will sound for about 5 minutes.
  - If "0" lights up in the display, the alarm will not sound in the event of a power interruption. Replace the battery if "0" lights up.
  - The snooze function cannot be set during a power interruption.
  - During a power interruption, each alarm will sound at the set time only once.

## Setting the Sleep Timer

You can fall asleep listening to radio or music from the connected device using the sleep timer. The system stops radio or playback automatically after a preset duration.



#### 1 Press **SLEEP** (**14**) while listening to radio or music.

"SLEEP" lights up and the sleep time duration begins to flash in the display.

#### 2 Press **SLEEP** (**14**) to select the sleep time duration.

You can change the sleep time duration (in minutes) as follows by pressing **SLEEP** (**14**) repeatedly. Only "OFF" does not flash.



The sleep time duration flashes for a few seconds, then the display returns to the clock. The sleep timer setting is completed and the sleep timer starts. "SLEEP" lights up in the display, and the system will stop radio or playback automatically after the setting duration.

#### To stop listening before the preset time

Press **OFF** (**1**).

#### To change the sleep timer setting

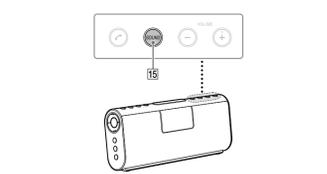
Press **SLEEP** (**14**). You can change the sleep time duration after the sleep timer has been activated.

#### To deactivate the sleep timer

Press **SLEEP** (**14**) to select "OFF."

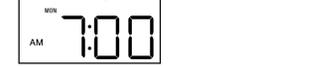
- Notes**
- Music playback on a device connected to the **AUDIO IN** jack does not stop automatically. To stop playback on the connected device, operate the connected device.
  - When the alarm time is set during the sleep timer duration, the sleep timer will be deactivated automatically when the alarm sounds.

## To Enjoy the Sound Effect Setting



#### 1 Press **SOUND** (**15**) to select the sound effect.

The sound effect setting lights up in the display.



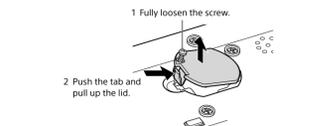
You can change the sound effect as follows by pressing **SOUND** (**15**) repeatedly.

Display	Sound effect
MEGA BASS	High-quality bass sound will be heard.
MEGA Xpand	Both high-quality bass and surround sound will be heard.
MEGA Xpand	Surround sound will be heard.
Off	The sound effect is off.

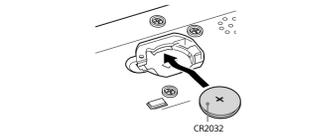
## ► Others

### Replacing the Battery

#### 1 Keep the AC plug connected to the wall outlet, then open the battery compartment on the bottom of the system.



#### 2 Remove the old battery and insert a new one in the battery compartment with the **+** side facing up.

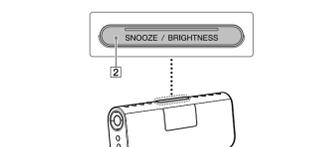


#### 3 Replace the battery compartment lid and tighten the screw.

#### 4 Press **FUNCTION**, **0** (BLUETOOTH) or **SNOOZE/ BRIGHTNESS** on the system to turn off "0" in the display.

- Notes**
- When you replace the battery, do not disconnect the plug from the AC outlet. Otherwise, the current date, current time, alarm and station presets will be erased.
  - If you are not going to use the system for a long time, remove the battery to avoid any damage that may be caused by leakage or corrosion.

## Setting the Brightness of the Display



#### 1 Press **BRIGHTNESS** (**2**).

You can change the four levels of brightness as follows by pressing **BRIGHTNESS** (**2**) repeatedly.



Even if brightness level is set to Off, it will change to Low while the alarm is sounding. Press and hold **BRIGHTNESS** (**2**) to turn off the display directly.

## Specifications

**AUDIO POWER SPECIFICATIONS**  
**POWER OUTPUT AND TOTAL HARMONIC DISTORTION:**  
 With 5 ohm loads both channels driven, from 150 Hz - 10,000 Hz: rated 2 watts per channel minimum RMS power, with no more than 10 % total harmonic distortion.

**Time display**  
 Switching between 12-hour system (default) and 24-hour system.

**Speaker section**  
 Speaker system: 50 mm (2 in) Enclosure type: Bass reflex

**Amplifier section**  
 Reference output power: 2 W + 2 W (10 % T.H.D., 1 kHz, 5 Ω)  
 Input: Stereo mini jack x 1

**USB section**  
 Input: USB port (type A)  
 Supported sampling frequencies/bit: USB input: Maximum 44.1 kHz/16 bit

**BLUETOOTH**  
 Communication System: BLUETOOTH Specification version 3.0  
 Output: BLUETOOTH Specification Power Class 2  
 Maximum communication range: Line of sight approx. 10 m (30 ft)<sup>\*)</sup>  
 Frequency band: 2.4 GHz band (2,400GHz - 2,4835 GHz)  
 Modulation method: FHSS  
 Compatible BLUETOOTH Profiles<sup>\*)</sup>: A2DP (Advanced Audio Distribution Profile) AVRCP (Audio Video Remote Control Profile) HSP (Headset Profile) HFP (Hands-free Profile) SPP (Serial Port Profile)  
 Supported Codec<sup>\*)</sup>: SB<sup>\*)</sup> Transmission range (A2DP): 20 Hz - 20,000 Hz (Sampling frequency 44.1 kHz)

- <sup>\*)</sup> The actual range will vary depending on factors such as obstacles between devices, magnetic fields around a microwave oven, static electricity, reception sensitivity, antenna's performance, operating system, software application, etc.

- <sup>\*)</sup> BLUETOOTH standard profiles indicate the purpose of BLUETOOTH communication between devices.

- <sup>\*)</sup> Codec: Audio signal compression and conversion format

**Microphone**  
 Type: Electret condenser  
 Direction characteristic: Omni directional  
 Effective frequency range: 200 Hz - 3,600 Hz

**Radio**  
 frequency range

Band	Frequency	Frequency step
FM	87.5 MHz - 108 MHz	0.1 MHz
AM	530 kHz - 1,710 kHz	10 kHz

**General**  
 Power: 120 V AC, 60 Hz, 16 W  
 For clock back up: 3V DC, CR2032 battery (1)  
 Dimensions: Approximately 281 mm x 126 mm x 80 mm (11 1/8 in x 5 in x 3 1/8 in) (w/h/d)  
 Mass: Approximately 1.3 kg (2 lb 14 oz) including batteries  
 Supplied accessories: AM loop antenna (1) BLUETOOTH Startup Guide (1) Operating Instructions (this document) (1)

### Compatible iPhone/iPad/iPod models

The compatible iPhone/iPad/iPod models are as follows. Update the software of the iPhone/iPad/iPod to the latest version before using it with this system.

**USB works with**  
 iPhone 5s  
 iPhone 5c  
 iPhone 5  
 iPhone 4s  
 iPhone 4  
 iPod touch (5th generation)  
 iPod touch (4th generation)  
 iPod touch (3rd generation)  
 iPod classic  
 iPod nano (7th generation)  
 iPod nano (6th generation)  
 iPod nano (5th generation)  
 iPod nano (4th generation)

### Wireless music streaming compatible models

iPhone 5s  
 iPhone 5c  
 iPhone 5  
 iPhone 4s  
 iPhone 4  
 iPad Air  
 iPad mini with Retina display  
 iPad (4th generation)  
 iPad mini  
 iPad (3rd generation)  
 iPad 2  
 iPod touch (5th generation)  
 iPod touch (4th generation)  
 iPod touch (3rd generation)  
 iPod nano (7th generation)

Design and specifications are subject to change without notice.

## What is BLUETOOTH wireless technology?

BLUETOOTH wireless technology is a short-range wireless technology that enables wireless data communication between digital devices, such as a computer and digital camera. BLUETOOTH wireless technology operates within a range of about 10 m (30 ft). Connecting two devices as necessary is common, but some devices can be connected to multiple devices at the same time. You do not need to use a cable for connection, nor is it necessary for the devices to face one another, such as the case with infrared technology. For example, you can use such a device in a bag or pocket. BLUETOOTH standard is an international standard supported by thousands of companies all over the world, and employed by various companies worldwide.

### Communication System and Compatible BLUETOOTH Profiles of the system

- Profile is standardisation of the function for each BLUETOOTH device specification. The system supports the following BLUETOOTH version and profiles: Communication System: BLUETOOTH Specification version 3.0  
 Compatible BLUETOOTH Profiles:  
 – A2DP (Advanced Audio Distribution Profile): Transmitting or receiving audio content of high-quality  
 – AVRCP (Audio Video Remote Control Profile): Controlling A/V equipment; pausing, stopping, or starting playback, etc.  
 – HSP (Headset Profile): Talking on the phone/Operating the phone.  
 – HFP (Hands-free Profile): Talking on the phone/Operating the phone by hands-free.  
 – SPP (Serial Port Profile): Establishing serial communication with BLUETOOTH device.

### Maximum communication range

- Use BLUETOOTH devices within 10 m (about 30 ft) (line of sight) of the system. Maximum communication range may shorten under the following conditions.  
 – There is an obstacle such as a person, metal, or wall between the system and BLUETOOTH device.  
 – A wireless LAN device is in use near the system.  
 – A microwave oven is in use near the system.  
 – A device that generates electromagnetic radiation is in use near the system.

### Interference from other devices

- Because BLUETOOTH devices and wireless LAN (IEEE802.11b/g) use the same frequency, microwave interference may occur and resulting in communication speed deterioration, noise, or invalid connection if the system is used near a wireless LAN device. In such a case, perform the following.  
 – Use the system at least 10 m (about 30 ft) away from the wireless LAN device.  
 – If the system is used within 10 m (about 30 ft) of a wireless LAN device, turn off the wireless LAN device.

### Interference to other devices

- Microwaves emitting from a BLUETOOTH device may affect the operation of electronic medical devices. Turn off the system and other BLUETOOTH devices in the following locations, as it may cause an accident.  
 – where inflammable gas is present, in a hospital, train, airplane, or a gas station  
 – near automatic doors or a fire alarm

### Notes

- To be able to use the BLUETOOTH function, the BLUETOOTH device to be connected requires the same profile as the system's. Note also that even if the same profile exists, devices may vary in function depending on their specifications.
- Due to the characteristic of BLUETOOTH wireless technology, the sound played on the system is slightly delayed from the sound played on the BLUETOOTH device during talking on the telephone or listening to the music.
- This system supports security capabilities that comply with the BLUETOOTH standard to provide a secure connection when the BLUETOOTH wireless technology is used, but security may not be enough depending on the setting. Be careful when communicating using BLUETOOTH wireless technology.
- We do not take any responsibility for the leakage of information during BLUETOOTH communication.
- A device featuring the BLUETOOTH function is required to conform to the BLUETOOTH standard specified by Bluetooth SIG, and be authenticated. Even if the connected device conforms to the above mentioned BLUETOOTH standard, some devices may not be connected or work correctly, depending on the features or specifications of the device.
- Noise or sound skips may occur depending on the BLUETOOTH device connected with the system, the communication environment or the usage environment.

## Troubleshooting



#### No sound / Sound from only one speaker / Low sound level

- Check that both this system and the connected device are turned on.
- Turn up the volume of the system and the connected device.



- Check that the connected device is being played back.



- If you are connecting a personal computer to the system, make sure the audio output setting of the computer is set for a BLUETOOTH device.

