

# Wireless Stereo Headphone System

## Operating Instructions

### MDR-RF4000K

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## English

### WARNING

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

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

Do not use the batteries (battery pack or batteries installed) to excessive heat such as sunshine, fire or the like for a long time.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

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

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

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

The nameplate is located on the bottom exterior when the transmitter is installed horizontally.



Hereby, Sony Corp., declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. For details, please access the following URL: <http://www.compliance.sony.de/>



This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

### Welcome!

Thank you for purchasing the Sony MDR-RF4000K Wireless Stereo Headphone System. Before operating the unit, please read this manual thoroughly and retain it for future reference. Some features are:

- Wireless stereo headphone system for music and movies
- 2.4 GHz digital transmission with high quality sound
- Impressive sound reproduction with 40 mm driver unit equipped high quality closed type headphones
- 2 way transmitter design for convenient setting
- Easy battery charging system
- Lightweight headphones for long time listening comfort
- Real-time automatic tuning on headphones for best reception of signal
- Up to 30 meters reception range\*
- 7 hours playback with supplied Ni-MH rechargeable battery
- Easy connection with TV/DVD/audio equipment with supplied audio cable
- Automatic On/Off function on headphones to preserve battery life
- Free adjustable headband for precise and comfortable fit
- Volume control function on the headphones

\* Transmission distance varies depending on conditions of use.

### Preparation

#### Checking the components and accessories

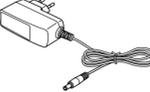
Before setting up the system, check that all of the components are included. Transmitter TMR-RF4000 (1)



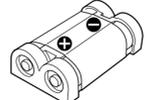
Wireless stereo headphones MDR-RF4000 (1)



AC power adaptor (1)



Rechargeable nickel-metal hydride battery BP-HP50-11 (1)



Connecting cable (stereo mini plug ← pin plug × 2), 1 m (1)



Unimatch plug adaptor (stereo mini jack ← stereo phone plug) (1)



Stand (1)



Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste.

On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources.

In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment.

For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries.

For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

**Notice for customers: the following information is only applicable to equipment sold in countries applying EU directives**  
The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

Use of the RLAN network is not allowed in the geographical area within a radius of 20 km from the centre of Ny-Alesund, Svalbard in Norway.

Use of the RLAN network is governed:  
• with respect to private use, by the Legislative Decree of 1.8.2003, no. 259 ("Code of Electronic Communications"). In particular Article 104 indicates when the prior obtaining of a general authorization is required and Art. 105 indicates when free use is permitted;  
• with respect to the supply to the public of the RLAN access to telecom networks and services, by the Ministerial Decree of 28.5.2003, as amended, and Art. 25 (general authorization for electronic communications networks and services) of the Code of electronic communications.

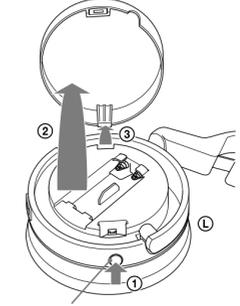
### Inserting the supplied rechargeable nickel-metal hydride battery

The supplied rechargeable nickel-metal hydride battery is not charged from the first time you use it. Be sure to charge it before use.

To charge the headphones, place them on the transmitter.

- 1 Press the PUSH button of the left housing to open the battery compartment lid.

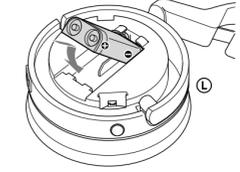
The battery compartment lid comes off.



PUSH button

- 2 Insert the supplied rechargeable nickel-metal hydride battery into the battery compartment, matching ⊕ terminal on the battery to the ⊕ mark in the compartment.

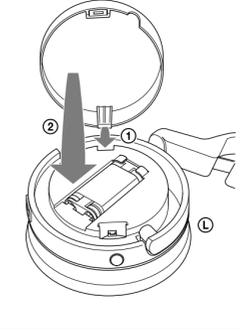
Do not attempt to charge any other kind of battery with this unit.



**Note**  
The battery compartment has a tab on the ⊕ side which holds the rechargeable battery in place. Insert the ⊖ terminal first when installing the rechargeable battery.

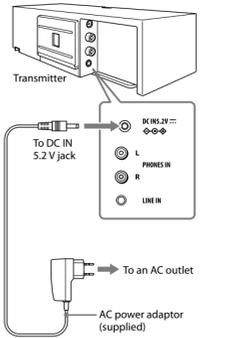
- 3 Close the battery compartment lid.

- 1 Insert the tab in the hole at the top left.
  - 2 Close the lid until it clicks.



### Charging

- 1 Connect the supplied AC power adaptor to the transmitter.



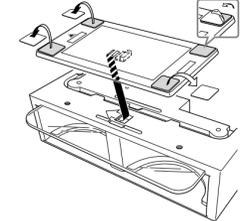
**Note**  
• Be sure to use the supplied AC power adaptor. Using AC adaptors with different plug polarity or other characteristics can cause product failure.

**Unified polarity plug**  
• Be sure to always use the supplied AC power adaptor. Even AC power adaptors having the same voltage and plug polarity can damage this product due to the current capacity or other factors.

- Connect the AC power adaptor to an easily accessible AC outlet. Should you notice an abnormality in the AC power adaptor, disconnect it from the AC outlet immediately.

- 2 Put the stand to the transmitter.

You can place the transmitter horizontally or vertically, using the stand.



### Notes on the transmitter with stand and installation surface

- The stand should not be placed on a surface that is cloth-covered, textured, dirty or dusty.
- Peel off the protection films (transparent) on the adhesive sheets (4 corners) of the stand. The stand cannot be installed with the protection films on the adhesive sheets.
- When placing the transmitter, press it down softly to steady the stand.

### If the power of the adhesive sheets becomes weak

Use a soft cloth slightly moistened to remove dust. A soft cloth with mild detergent solution may be used to remove finger marks or grease. The power of the adhesive sheets will be restored for repeated use.

### To change the installation place

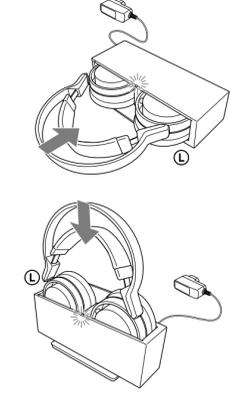
Move the stand slowly with your fingers on the edge of the stand. The adhesive sheets will not be detached with a sharp move.

- 3 Turn the left and right headphones so as to be flat.



- 4 Insert the headphones in the transmitter so that the headphones' contact point meets the transmitter's contact pin, and make sure that the CHG indicator lights up.

It takes approximate 16 hours to fully charge the battery (the CHG indicator goes off when charging is complete). When placing the headphones on the transmitter, be sure to insert the left and right housings completely. When the transmitter's contact pin meets the headphones' contact point, the CHG indicator lights up in red.



### If the CHG indicator is not lit

- Be sure to close the battery compartment lid. The battery charge function is not activated when the lid is not fully closed.
- Check that the left and right headphones are inserted in the transmitter correctly.
- The indicator will not light up if the headphones' contact point does not meet the transmitter's contact pin. In this case, remove the headphones and insert them in the transmitter again so that the indicator lights up.
- Make sure that the supplied rechargeable nickel-metal hydride battery is installed in the battery compartment.
- You cannot charge any rechargeable battery or dry-cell battery other than the supplied battery.

### To recharge the headphone battery after use

Place the headphones on the transmitter after use. The CHG indicator lights up, and then charging starts.

Since the built-in timer recognises when charging is complete, there is no need to remove the headphones from the transmitter after charging has completed.

### Notes

- The transmitter automatically turns off while charging the battery.
- This system is designed to charge only the supplied rechargeable battery, type BP-HP50-11, for safety. Note that other types of rechargeable battery cannot be charged with this system.
- You cannot charge any rechargeable battery or dry-cell battery other than the supplied battery.
- Do not attempt to use the supplied BP-HP50-11 rechargeable battery with other components. It is for use with this system only.
- Charge in an environmental temperature of between 0°C and 40°C. Otherwise, the battery may not be fully charged.
- Do not touch the contact pin of the transmitter. If a contact pin becomes dirty, charging may not be possible.
- Charging may not be completed if the transmitter's contact pin and headphones' contact point are dusty. Wipe them with a cotton bud, etc.

### Charging and usage time

Approx. charging time	Approx. usage time <sup>*1</sup>
16 hours <sup>**2</sup>	7 hours <sup>**1</sup>

<sup>\*1</sup> At 1 kHz, 1 mW + 1 mW output  
<sup>\*\*1</sup> hours required to fully charge an empty battery  
<sup>\*\*2</sup> Time may vary, depending on the temperature or conditions of use.

### Checking the remaining battery power

Pull up the self-adjusting band and check the POWER indicator located on the right housing. The battery is still serviceable when the indicator lights in green.

Change the rechargeable battery or install new dry-cell batteries if the POWER indicator light dims, flashes, or the sound becomes distorted or noisy.

### Note

The rechargeable nickel-metal hydride battery should be replaced with a new one when it lasts only half the expected time, after a full charge has been performed. The rechargeable battery, type BP-HP50-11, is not commercially available. You can order the battery from the store where you purchased this system, or at your nearest Sony dealer.

### Using the headphones with alkaline batteries (sold separately)

Commercially available (size AAA) alkaline batteries can also be used to power the headphones. Install the batteries in the same manner as described in "Inserting the supplied rechargeable nickel-metal hydride battery". When dry-cell batteries are installed, the battery charge function is not activated.

### Battery life

Battery	Approx. hours <sup>*1</sup>
Sony alkaline batteries LR60/AM-40N	10 hours <sup>**1</sup>

<sup>\*1</sup> At 1 kHz, 1 mW + 1 mW output  
<sup>\*\*1</sup> Time may vary, depending on the temperature or conditions of use.

### Notes on Batteries

- Do not charge a dry-cell battery.
- Do not carry a dry-cell battery together with coins or other metallic objects. Heat can be generated by the battery if its positive and negative terminals are accidentally shorted.
- If you are not going to use the unit for a long time, remove the batteries to avoid damage from battery leakage or corrosion.

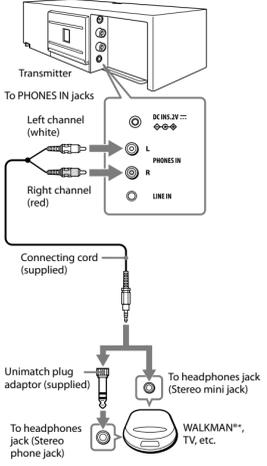
### Connection

#### Setting up the transmitter

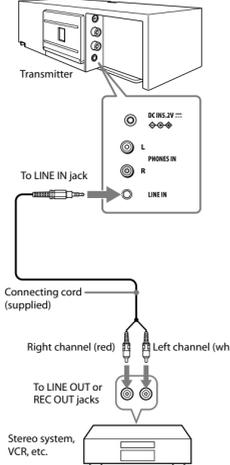
- 1 Connect the transmitter to an AV component.

Select one of the hooksups below depending on the jack type:

- ⓐ To connect to a headphones jack



- ⓑ To connect to LINE OUT or REC OUT jack



<sup>\*</sup> "WALKMAN" and "WALKMAN" logo are registered trademarks of Sony Corporation.

### Operation

#### Listening to a programme

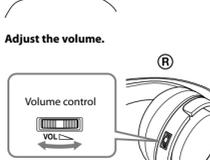
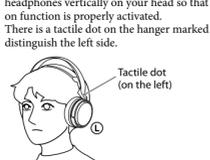
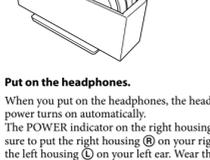
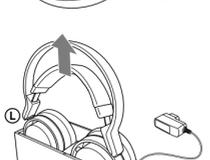
**Before listening**  
To reduce the risk of hearing damage, first lower the volume.

- 1 Turn on the AV component connected to the transmitter.

If the transmitter is connected to the headphone jack, set the volume control of the audio source component as high possible but not so high that the audio signal becomes distorted.

- 2 Remove the headphones from the transmitter.

The transmitter's POWER indicator lights up in green.



### Notes

- When watching films, be careful not to raise the volume too high in quiet scenes. You may hurt your ears when a loud scene is played.
- You may hear some noise when you disconnect the AC power adaptor from the transmitter before removing the headphones.

### RF signal transmission area

The approximate RF signal transmission area from the transmitter is up to 30 m.

Rechargeable nickel-metal hydride batteries are removed from the transmitter. The sound may be interrupted if the headphones are out of RF signal transmission area or reception conditions deteriorate. In this case, move closer to the transmitter.

### Notes

- Because this system transmits signals at 2.4 GHz, sound may be interrupted if interference occurs. This is due to radio frequency characteristics, and is not a malfunction.
- Any noise you hear through the headphones may vary depending on the transmitter position and room conditions. It is recommended that you place the transmitter in a location that produces the clearest sound.
- Sound may be interrupted if the transmitter is used with other wireless apparatus using 2.4 GHz frequency, or a microwave oven.

### If an audio signal is not input for 10 minutes

RF signal transmission from the transmitter automatically stops when an audio signal is not input for 10 minutes. When the transmitter stops, the transmitter's POWER indicator blinks in green for 30 seconds and then turns off. The RF signals are automatically transmitted when an audio signal is input again. RF signal transmission may stop when an extremely low sound is input for about 10 minutes. If this happens, raise the volume of the connected AV component and lower the volume of the headphones. If signal noise is output from a component connected to the PHONES IN jacks, RF signal transmission may not stop.

### The headphones automatically turn off when they are removed

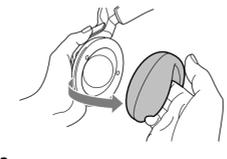
**— Auto Power On/Off function**  
Do not pull up the self-adjusting band when not in use, as this will consume the battery power.



### Replacing the earpads

The earpads are replaceable. If the earpads become dirty or worn out, replace them as illustrated below. The earpads are not commercially available. You can order replacements from the store where you purchased this system, or at your nearest Sony dealer.

- 1 Remove the old earpad by pulling it off.



- 2 Place the new earpad around the housing.



### Additional information

#### Troubleshooting

If you run into any problems using this headphone system, use the following checklist. Should any problem persist, consult your nearest Sony dealer.

#### No sound

- Check the connection between the transmitter and the AV component.
- Turn on the AV component connected to the transmitter, and start the playback.
- If you connect the transmitter to an AV component using the headphone jack, raise the volume level on the connected AV component.
- Make sure you are wearing the headphones correctly.
- Raise the headphones volume.
- The headphones' POWER indicator goes off.
  - Charge the rechargeable battery if it is weak, or replace alkaline batteries with new ones. If the POWER indicator is still off after charging the battery, take the headphones to a Sony dealer.

#### Distorted or intermittent sound (sometimes with noise)

- Check if there is any wireless apparatus using 2.4 GHz frequency, or a microwave oven in the vicinity.
- Change the position of the transmitter.
- If you connect the transmitter to an AV component using the headphone jack, lower the volume level on the connected AV component.

#### Low sound

- If you connect the transmitter to an AV component using the headphone jack, raise the volume level on the connected AV component.
- Raise the headphone volume.

#### Loud background noise

- Check if there is any wireless apparatus using 2.4 GHz frequency, or a microwave oven in the vicinity.
- If you connect the transmitter to an AV component using the headphone jack, raise the volume level on the connected AV component.
- Charge the rechargeable battery if it is weak, or replace alkaline batteries with new ones. If the POWER indicator is still off after charging the battery, take the headphones to a Sony dealer.

#### The sound cuts off.

- The transmitter stops transmitting if no signal is input for 10 minutes.
  - If you connect the transmitter to an AV component using the headphone jack, raise the volume level on the connected AV component.

### The battery cannot be charged.

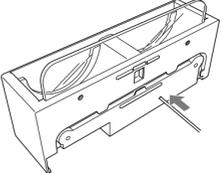
- Check if the CHG indicator turns on. If not, put the headphones on the transmitter correctly so that the CHG indicator turns on.
- Dry batteries are installed.
  - Insert the supplied rechargeable nickel-metal hydride battery.
  - Rechargeable batteries other than the supplied are installed.
  - Insert the supplied rechargeable nickel-metal hydride battery.
- The transmitter's contact pin and headphones' contact point are dusty.
  - Wipe them with a cotton bud, etc.

### A repeated beep sounds.

- The headphones cannot receive the signal from the transmitter.
  - Move within the RF signal transmission area.
  - Check the connection of the transmitter, AC power adaptor, and AC outlet.
  - Check if there is any wireless apparatus using 2.4 GHz frequency, or a microwave oven around the transmitter and headphones.
  - Change the position of the transmitter.
- There is no audio signal input for about 10 minutes and RF signals are not transmitted.
  - Input the audio signal to the transmitter.

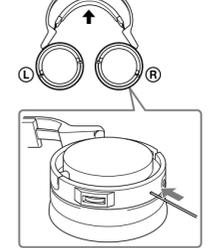
### The unit does not operate properly.

- Reset the system.
  - Push a small pin, etc., into the hole of the transmitter until you feel a click.
  - The POWER indicator on top starts blinking in green.



Once the POWER indicator starts blinking, pull up and hold the self-adjusting band to turn on the headphones, and push a small pin, etc., into the hole of the right headphone until you feel a click.

The POWER indicator of the transmitter stops blinking and stays lit in green.



### Precautions

#### On safety

- Do not touch, hit, or otherwise expose the headphones to strong shock of any kind. This could damage the product.
- Do not disassemble or attempt to open any parts of the system.

#### On power sources and placement

- If you are not going to use the system for a long time, unplug the AC power adaptor from the AC outlet. When removing the plug, grip the AC power adaptor. Do not pull on the cord.
- Do not place the system in any of the following locations.
  - Location exposed to direct sunlight, near a heater, or other extremely high-temperature location
  - Dusty location
  - On an unsteady or inclined surface
  - Location exposed to large amounts of vibration
  - Bathroom or other high-humidity locations

#### On headphones

- **Act considerably**  
When the volume is too high, the sound leaks out high that it bothers people around you. There is a tendency to raise the volume when using in noisy places. However, for reasons of safety, it is advised to keep the volume at a level whereby you can still hear sounds around you.

#### On cleaning

Use a soft cloth slightly moistened with mild detergent solution. Do not use solvents such as thinner, benzene or alcohol as these may damage the surface.

#### When the product breaks

- When the product breaks, or if a foreign object gets inside the unit, immediately turn off the power and consult your nearest Sony dealer.
- When taking the system to a Sony dealer, be sure to take both the headphones and transmitter.

### Specifications

<b>Wireless stereo transmitter (TMR-RF4000)</b>	
<b>Modulation System</b>	GFSK
<b>Carrier wave frequency</b>	2.404 GHz - 2.476 GHz
<b>Transmission distance</b>	Approx. 30 m of longest
<b>Frequency response</b>	10 Hz - 22,000 Hz
<b>Distortion rate</b>	1% or less (1 kHz)
<b>Audio inputs</b>	Phono jacks (left/right) Ster