

# ***Wireless Stereo Headphone System***

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Operating Instructions

***MDR-RF830RK***

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## WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

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

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## Welcome!

Thank you for purchasing the Sony MDR-RF830RK Wireless Stereo Headphone System. Before operating the unit, please read this manual thoroughly and retain it for future reference.

Some features are:

- Wireless system that allows you to listen to a program free from the restriction of a cord.
- High fidelity sound reproduction
- Compact transmitter which operates on AC power using the supplied AC power adaptor and which also functions as battery charger
- Comfortable Supra-aural headphones with self adjusting head band
- Automatic ON/OFF function on headphones to preserve battery power
- Mute function to avoid noise when no audio signal is available.
- Either supplied rechargeable batteries or commercially available R6 (size AA) dry batteries are used for the power source of the headphone.

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## Notes on receiving performance

The system for this equipment utilizes very high frequency signals in the 800 MHz band so the receiving performance may deteriorate due to the surroundings. The following examples illustrate conditions that may reduce the possible receiving range or cause interference with reception.

- Inside a building with walls containing steel beams.
  - Area with many steel file cabinets, etc.
  - Area with many electrical appliances capable of generating electromagnetic noise.
  - Transmitter is placed on a metal instrument.
  - Area facing roadways.
  - Noise or interfering signals exist in the surroundings due to radio transceivers in trucks, etc.
  - Noise or interfering signals exist in the surroundings due to wireless communication systems installed along roadways.
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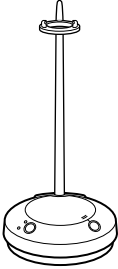
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## Unpacking

Check that you have the following items:

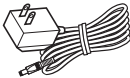
- The transmitter



- Ni-Cd rechargeable batteries NC-AA-HJ



- AC power adaptor



- The headphones



- Unimatch plug adaptor (stereo mini jack ↔ stereo phone plug)



- Connecting cord (phono plugs ↔ stereo mini plug), 1 m



## Charging the headphones' batteries

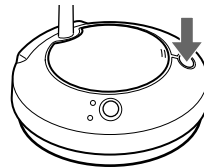
### Using the headphones for the first time

The headphones are powered by either supplied rechargeable batteries or commercially available R6 (size AA) batteries.

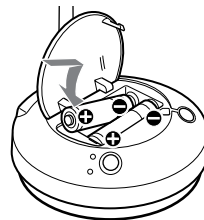
When you use the headphones with the supplied rechargeable batteries NC-AA-HJ for the first time, charge the batteries in the following manner.

NC-AA-HJ is applicable only for Sony cordless/wireless headphone systems. Never use for any other purpose.

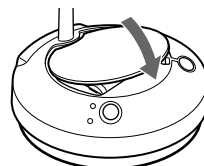
- 1** Press the OPEN button to open the battery compartment lid of the transmitter.



- 2** Insert two NC-AA-HJ batteries supplied by matching the ⊕ and ⊖ on the batteries to the ⊕ and ⊖ in the battery compartment.



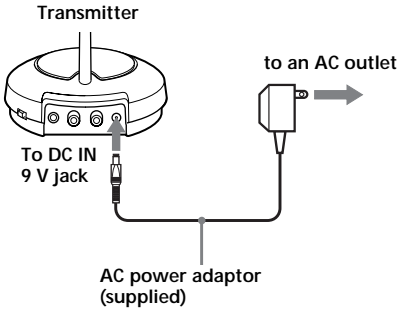
- 3** Close the battery compartment.



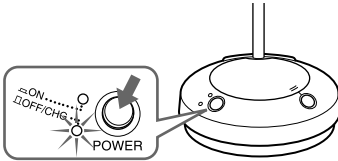
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Continued

- 4** Connect the transmitter to a power source.



- 5** Press the OFF/CHG•POWER ON switch so that the OFF/CHG indicator lights up green. Charging starts.



### Notes

- Charge only the supplied rechargeable batteries NC-AA-HJ.
- You cannot recharge other R6 (size AA) rechargeable batteries (NC-AA etc.) with this unit.
- Be sure to charge both the rechargeable batteries at a time. The charger cannot charge the batteries one by one.
- Use only the supplied AC power adaptor. Do not use any other AC power adaptor.



Polarity of the plug

### To recharge the headphones' batteries after use

To charge the batteries, follow steps above. Since little electric current is used for charging, there is no need to worry about overcharging.

### Charging and using hours

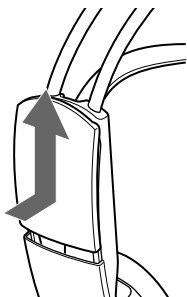
Approx. charging hours	Approx. using time*
1	50 minutes
24**	20 hours

\* at 1 kHz, 1 mW + 1 mW output

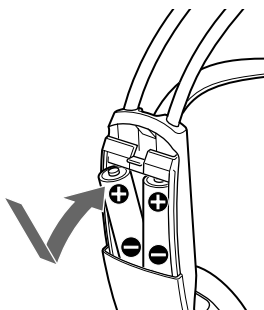
\*\* The hours required to fully charge empty batteries

# Setting up the headphones

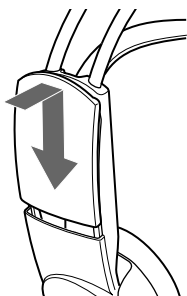
- 1 Open the battery compartment lid on the left outer side of the head band.



- 2 Insert two charged NC-AA-HJ batteries by matching the  $\oplus$  and  $\ominus$  on the batteries to the  $\oplus$  and  $\ominus$  in the battery compartment.



- 3 Close the battery compartment lid.



## Using the headphones with a commercially available R6 (size AA) dry batteries

Install the batteries in the manner as described in "Setting up the headphones."

### Battery life

Battery	Approx. hours*
Sony alkaline battery LR6 (SG)	60
Sony battery R6P (SR)	30

\* at 1 kHz, 1 mW + 1 mW output

### Notes on batteries

To avoid damage to the system caused by battery leakage and corrosion;

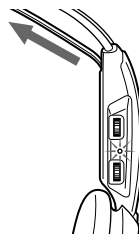
- Install the batteries with the correct polarity.
- Do not try to recharge dry batteries.
- Remove the batteries if the system is not to be used for a long period of time.

In case of battery leakage, wipe off any deposit in the battery compartments before installing new batteries.

### Check the remaining power of the headphones' battery

Pull up the self adjusting band, and check that the headphones' power indicator lights in red. You can now use the headphones.

Charge the battery or install a new dry battery, if the power indicator light is weak or turned off and the sound become distorted or has a lot of noise.



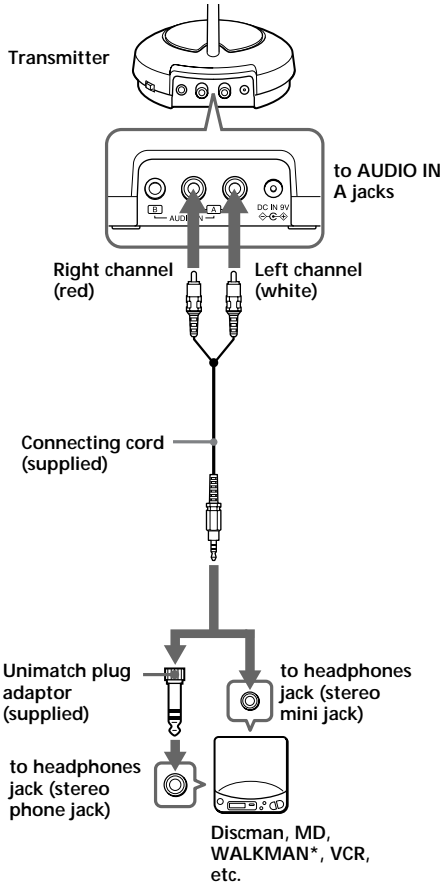
### Notes

- During recharging, the transmitter is turned off.
- When the life of the rechargeable batteries are shortened by half even after a proper recharging, replace them with new NC-AA-HJ batteries.

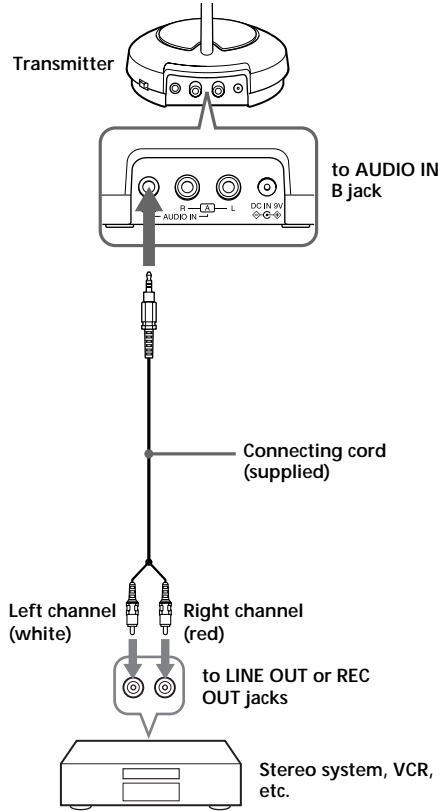
# Setting up the transmitter

**1** Connect the transmitter to audio/video equipment. Select one of the hookups below depending on the jack type:

**a** To connect to a headphones jack

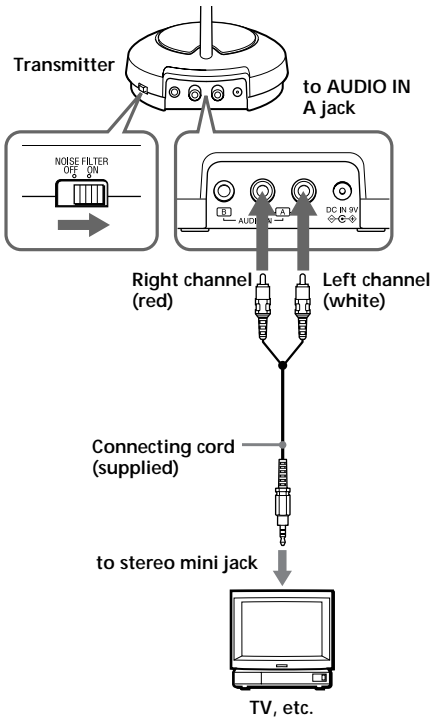


**b** To connect to LINE OUT or REC OUT jacks



Ⓒ To connect to TV etc.

If noise occurs when the transmitter is connected to your TV or VCR, set the NOISE FILTER switch to ON.



**Note**

- If you connect the transmitter to LINE OUT or REC OUT jack of an audio reproducer such as an MD player or CD player, do not set the NOISE FILTER switch to ON. Otherwise, the volume will be limited.
- The NOISE FILTER switch effects the sound only in cases such as connection diagram Ⓒ. In diagrams Ⓐ and Ⓑ on page 6, the switch has no effect.
- When the transmitter is placed on or near a TV, it may pick up a noise. In such case, place the transmitter away from the TV.

**2** Connect the transmitter to an AC outlet using the supplied AC power adaptor.

**Notes**

- Use only the supplied AC power adaptor. Do not use any other AC power adaptor.



Polarity of the plug

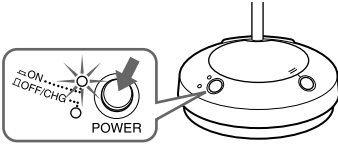
- When you connect the connecting cord directly to an earphone jack, the audio signal will not be output through the right channel. In such a case, use the separately sold PC-236HG plug adaptor.
- If the connected equipment has the AVLS (Automatic Volume Limiter System) function, be sure to turn the function off when using the transmitter. Otherwise, you will have to turn up the volume of the headphones, and that may cause noise.

\* WALKMAN is a registered trademark of Sony Corporation.

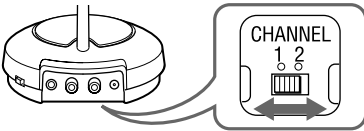
## ▶ Operating the system

# Listening to a program

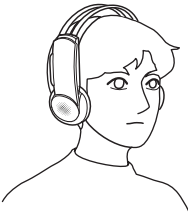
- 1 First turn on the audio/video equipment, then turn on the transmitter.



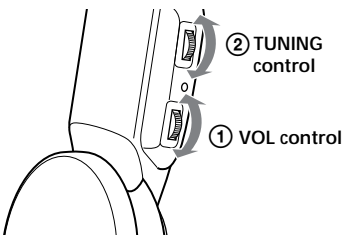
- 2 Select the radio frequency with the CHANNEL selector switch.



- 3 Put on the headphones and the power turns on automatically.



- 4 Turn up the volume to a moderate level with the VOL control, then tune the headphones in to the frequency of the transmitter with the TUNING control until you can hear the audio signal loud and clear.



### Sending RF signals from the Transmitter

The transmitter starts sending the RF signals automatically, when it detects audio signals from the equipments connected.

If it does not detect an audio signal for more than approximately one minute, the transmitter will stop sending RF signals.

But the Power indicator remains lighting. When the transmitter receives an audio signal again, it starts sending the RF signals.

If the audio signal is very weak, the transmitter does not send RF signals automatically. In this case, make sure the volume of the equipments connected is set to 5 - 6.

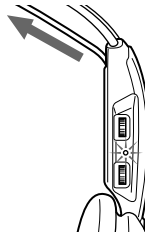
You may not hear the beginning of the sound from the headphones until the transmitter starts sending the RF signals after detecting an audio signal.

### Note

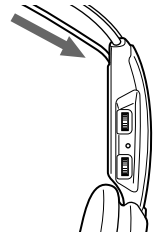
If the transmitter is connected to the headphones jack of the source equipment, set the volume of that equipment as high as possible without distorting the audio signal.

### Auto power on/off function

When you remove the headphones, the power turns off automatically. Do not allow the self adjusting band to be pulled up, otherwise the headphones will be switched on.



The power turns on.



The power turns off.

### Mute function

If a hissing noise is heard when the headphones are used outside of the effective range (see the next section), the mute function will be activated and the sound will not be heard from the headphones. To restore the sound, move near toward the transmitter.

- 8 Try the above steps 2 and 4 until the receiving performance becomes better.



### After listening to a program

Take the headphones off and rest them away on the holder of the transmitter as shown below.



### Note

Do not hang the headphones by the self adjusting band, otherwise, the self adjusting band will be pulled up and the headphones will be switched on.

## The effective areas of the transmitter

The optimum distance is up to approximately 100 m without the system picking up some interference. However, the distance may vary according to the surroundings and environment. If the system picks up some noise while using it within the above mentioned distance, reduce the distance between the transmitter unit and the headphones, or select the other channel.

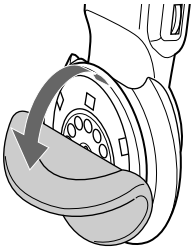
### Notes

- When you use the headphones inside the effective areas of the transmitter, the transmitter can be placed in any direction from the listener.
- Even within the signal reception area, there are some spots (dead spot) where the RF signal can not be received. This characteristics is inherent to RF signals, and does not indicate malfunction. By slightly moving the transmitter, location of the dead spot can be changed.

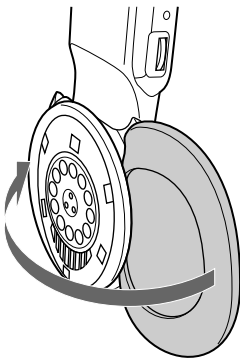
## Replacing the ear pads

When the ear pads become dirty or damaged, you can get replacements from your Sony dealer. Replace them as illustrated below.

- 1** Remove the old ear pad by pulling it out of the groove on the housing.



- 2** Place the new ear pad on the driver unit and insert the edge of the pad into the groove as illustrated.



Make sure that the entire edge of the ear pad is securely inserted into the groove.

## Precautions

- When the headphones are not to be used for a long period of time, remove the batteries to avoid damage caused by battery leakage and subsequent corrosion.
- When the transmitter is not to be used for a long period of time, disconnect the AC power adaptor from the AC outlet holding the plug. Do not pull on the cord. Also remove the batteries to avoid damage caused by battery leakage and subsequent corrosion.
- Do not leave the wireless stereo headphone system in a location subject to direct sunlight, heat or moisture.

### Notes on headphones

#### Preventing hearing damage

Avoid using headphones at high volume.

Hearing experts advise against continuous, loud and extended play. If you experience a ringing in your ears, reduce the volume or discontinue use.

#### Caring for others

Keep the volume at a moderate level. This will allow you to hear outside sounds and to be considerate to the people around you.

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

Be sure to bring the headphones and the transmitter to the Sony dealer when requiring repair work.

# Troubleshooting

<b>Problem</b>	<b>Solution</b>
No sound/ Muffled sound	<p>Turn on the transmitter first, then put on the headphones.</p> <p>Check the connection of the audio/video equipment or the AC power adaptor.</p> <p>Check that the audio/video equipment is turned on.</p> <p>Turn up the volume on the connected audio/video equipment, if the transmitter is connected to the headphones jack.</p> <p>Select the radio frequency with the CHANNEL selector, then tune the headphones in the frequency of the transmitter with the TUNING control.</p> <p>The mute function is activated. Use the headphones near the transmitter.</p> <p>The headphones' POWER indicator light is weak or turned off.</p> <ul style="list-style-type: none"><li>• Charge the rechargeable batteries or if the POWER indicator is still off after charging the batteries, replace them with new NC-AA-HJ batteries.</li><li>• If you are using the conventional dry batteries, replace it with new ones.</li></ul> <p>If you connect the transmitter to LINE OUT or REC OUT jack of an audio reproducer, make sure that the NOISE FILTER switch is set to OFF.</p>

<b>Problem</b>	<b>Solution</b>
Distortion	<p>If the transmitter is connected to the headphones jack, turn down the volume of the connected audio/video equipment.</p> <p>Select the radio frequency with the CHANNEL selector.</p> <p>The headphones' POWER indicator light is weak or turned off.</p> <ul style="list-style-type: none"><li>• Charge the rechargeable batteries or if the POWER indicator is still off after charging the batteries, replace them with new NC-AA-HJ batteries.</li><li>• If you are using the conventional dry batteries, replace it with new ones.</li></ul> <p>If you connect the transmitter to LINE OUT or REC OUT jack of an audio reproducer, make sure that the NOISE FILTER switch is set to OFF.</p>
Loud background noise	<p>Move closer to the transmitter. As you move away from the transmitter, more noise is likely to be heard.</p> <p>If the transmitter is connected to the headphones jack, turn up the volume of the connected audio/video equipment.</p> <p>Select the radio frequency with the CHANNEL selector, then tune in the frequency of the transmitter with the TUNING control.</p> <p>The headphones' POWER indicator light is weak or turned off.</p> <ul style="list-style-type: none"><li>• Charge the rechargeable batteries or if the POWER indicator is still off after charging the batteries, replace them with new NC-AA-HJ batteries.</li><li>• If you are using the conventional dry batteries, replace it with new ones.</li></ul> <p>If you connect the transmitter to LINE OUT or REC OUT jack of an audio reproducer, make sure that the NOISE FILTER switch is set to OFF.</p>

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<b>Problem</b>	<b>Solution</b>
The batteries cannot be charged.	The dry batteries are installed. • Install the supplied rechargeable batteries.
	The rechargeable batteries other than NC-AA-HJ are installed. • Install NC-AA-HJ rechargeable batteries.
Incapable of the tuning	Turn up the volume moderately, then tune in the frequency.

## Specifications

### General

Carrier frequency	863.32 – 863.67 MHz
Channel	Ch1, Ch2
Modulation	FM stereo
Frequency response	20 – 20,000 Hz

### Transmitter TMR-RF830R

Power source	DC 9 V: supplied AC power adaptor
Audio input	phono jacks/stereo mini jack
Dimensions	Approx. 120 mm dia × 290 mm (4 3/4 × 11 1/2 in.) (w/h)
Mass	Approx. 155 g (5.5 oz.)

### Headphones MDR-RF830

Power source	DC 3 V: 2 × R6 (size AA) battery or 2 × supplied NC-AA-HJ Ni-Cd rechargeable battery
Mass	Approx. 215 g (7.6 oz.) incl. Ni-Cd batteries

### Supplied Ni-Cd rechargeable batteries

Model name	NC-AA-HJ
Voltage	1.2 V
Capacity	600 mAh

### Optional accessories

Ni-Cd rechargeable battery	NC-AA-HJ
Plug adaptor	PC-236HG (stereo mini jack ↔ monaural mini plug)

Design and specifications are subject to change without notice.