

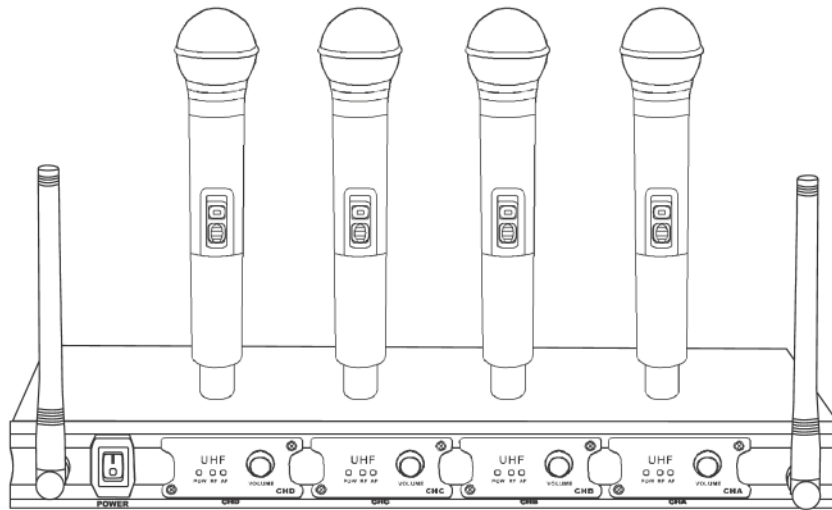


UHF-4000R

Professional UHF 4-Channel Wireless Rechargeable Microphone System

User Manual

NOTE: To ensure this system works safely and to its fullest potential, please read this User's Manual carefully before operation and keep for future reference.



Thank you for purchasing Acesonic UHF-4000R Professional UHF 4-Channel Wireless Rechargeable Microphone System. Acesonic takes pride in providing its customers with only the most advanced and highest quality products on the market. With proper care and use your Acesonic product will provide you with many years of enjoyment.

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Parts Checklist

Your Acesonic UHF-4000R System includes:

- Four handheld rechargeable wireless microphones
- One UHF-4000R receiver
- Two antennas
- Three 14V 800mA power adapters
- Eight Ni-Mh rechargeable AA batteries
- Two battery rechargeable docking stations
- One 3-ft. male to male ¼-inch cable
- One rack-mount kit
- One warranty registration card

Be sure to keep original packaging in case re-shipping is required for returns or repairs.

Accessories such as batteries are not included in the warranty coverage.

First Things First

Before installing your wireless microphone, there are a few things you should do and know:

- Make sure your local power outlet supplies the correct voltage for the AC adapter. Only use the adapters supplied with the system.
- Turn off your audio system during set-up and turn down volume.
- Fully charge your batteries before using the system.
- Plug the power adapter cord jack into the matching power socket on the rear of the receiver. Make sure the power switch is OFF "0" and all four volume controls are turned down to the negative position before beginning any installation.

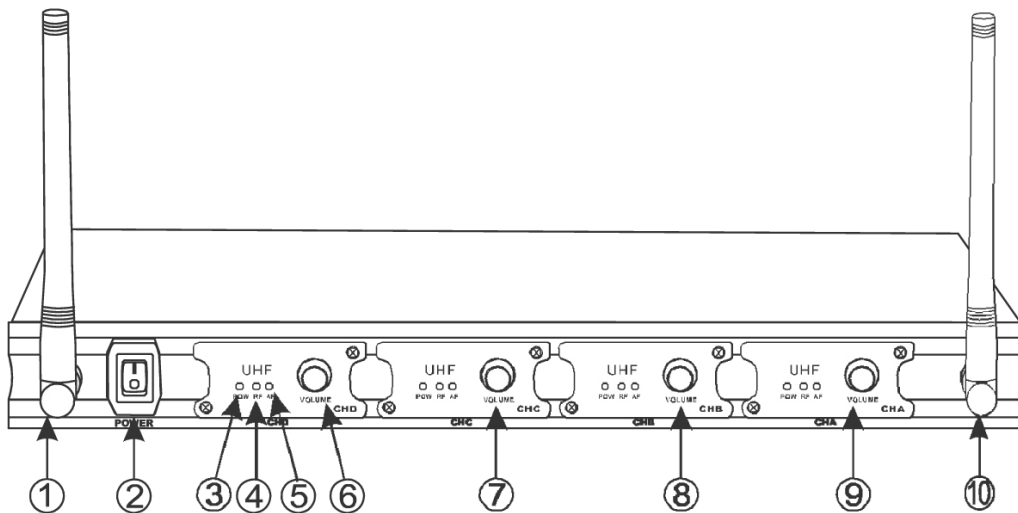
- Do not dismantle the receiver on your own. For needed repairs, contact your dealer

Care and Cleaning

Make sure the power is disconnected before cleaning the receiver unit. Use a soft cloth to clean the receiver and microphones. DO NOT use chemicals or any cleaning agents to clean the receiver or microphones.

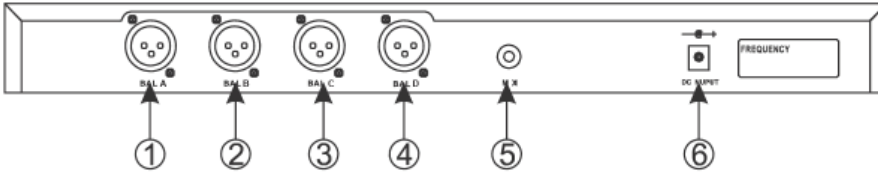
- If you will not be using the system for an extended period of time, disconnect all power sources. Remove the batteries from microphones.

Receiver Description (Front)



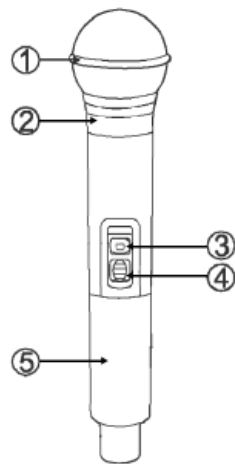
- ① Antenna for Channels C & D
- ② Power switch
- ③ Power LED. Lights to indicate that the channel is receiving power from the adapter.
- ④ RF LED (Radio Frequency). Lights to indicate that the channel has locked onto its microphone's signal.
- ⑤ AF LED (Audio Frequency). Lights to indicate that the channel is receiving audible frequencies from the microphone.
- ⑥ Volume Control for Channel D
- ⑦ Volume Control for Channel C
- ⑧ Volume Control for Channel B
- ⑨ Volume Control for Channel A
- ⑩ Antenna for Channels A & B

Receiver Description (Back)



- ① XLR balanced audio output for Channel A
- ② XLR balanced audio output for Channel B
- ③ XLR balanced audio output for Channel C
- ④ XLR balanced audio output for Channel D
- ⑤ 1/4-inch unbalanced audio output
- ⑥ DC power adapter socket

Microphone Description



- ① Microphone cartridge
- ② Transmission antenna
- ③ Operating indicator light (Green means power is on & working, yellow means power is on & muted.)
- ④ On/Mute button
- ⑤ Battery compartment: This is the base of the microphone where you would hold it, as well as the device's battery cover.

Charging the Microphones

Inserting the rechargeable microphone batteries:

- Grip the upper portion of the microphone with one hand and twist the lower portion (battery housing cover) counter-clockwise until it fully unscrews. Slide it off and place it to the side. The battery compartment gate is now visible. With your thumb and forefinger, go over the curved grips, pull the gate open and out. It should pivot on its hinge at the lower end.

- Place two AA Ni-Mh rechargeable batteries into the battery compartment spaces provided. Press the

batteries firmly to make sure that they have clicked into place. Snap the battery compartment gate shut. Screw the battery housing cover back on.

Using the charging station:

- Plug the AC power adapter cord jack into the matching power socket on the rear of the charging station. Plug the AC adapter into an AC outlet.

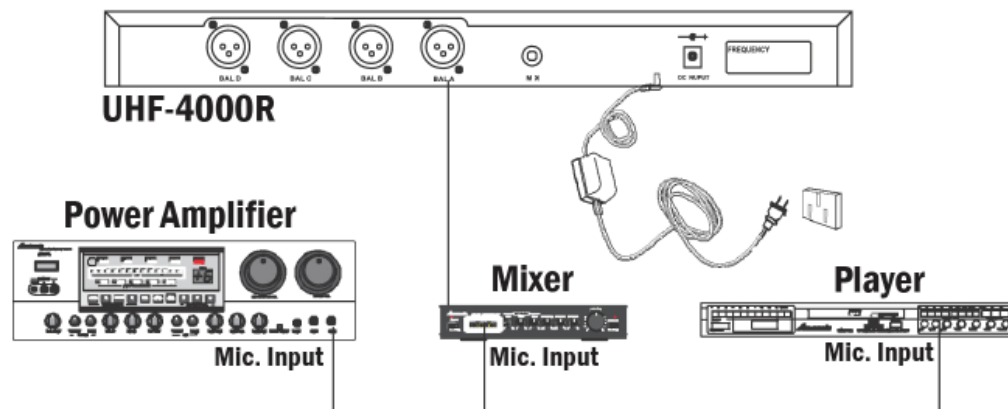
- Stand the microphones upright into the station's dual base charging station. Each status LED on the charging station will light up RED to indicate a good connection and that the batteries are charging. Allow the batteries to charge fully before removing the microphones from the charging station.

- When system is not in use, unplug the receiver from

- the wall socket and remove the power adapter from the rear panel.

- If a microphone won't be used for an extended period of time or putting it in storage, remove the batteries to prevent corrosion.

Cable Connections & Operating the Microphone System



- Unpack the box. Screw the dual antennas into the connectors on each side of the front panel of the receiver unit. Point them both upward in a vertical position.

- Use the provided 1/4-inch cable to connect the UHF-4000R receiver from the 1/4-inch Unbalanced Audio Output to the “Mic In” on your amplifier, mixer or player. Alternatively on a multi-channel mixer, use the four optional XLR output ports on the back of the receiver. Use 1/4-inch XLR cables* to connect the microphones. *Cables not included.

- Plug the power adapter into an AC outlet. Press ON “1” on the power switch. All four channel Power LEDs should light up RED. If any microphones have been left on and are in range, their corresponding receiver RF LEDs will light yellow.

- Press the microphone’s ON/MUTE button for one second. GREEN light indicates “ON”. YELLOW light indicates “MUTE”. Test the microphone by speaking into it. The corresponding AF LED on the receiver should pulse GREEN with your voice.

- Press for one second again to turn off the microphone.

- The UHF-4000R receiver has 4 separate volume controls for each microphone. Check your system set-up for Master Volume Control.

- It’s always a good idea to turn all volume controls down after using any audio device. This will help prevent accidental damage to speakers, headphones and/or your ears upon the next use.

- For best performance, hold the microphone horizontally and speak or sing directly into it’s top. To avoid distortion, keep a distance of two inches between your mouth and the microphone.

- If so desired, mount the UHF-4000R receiver into a console or rack by using the provided rack-mount brackets. Make sure holes are aligned and screwed with even tension.

Product Features

- UHF rack-mountable compact receiver with four handheld microphones and individual volume controls
- Rechargeable batteries for all four microphones complete with two charging stations
- Enhanced muting: Almost zero noise output when on standby
- High signal-to-noise ratio
- Super-low distortion
- Four fixed channels with removable receiver modules
- Operative status signals: separate Power, RF, and AF LED displays for each channel
- Wide range of use: up to 200 feet under ideal circumstances; 50 feet radius under normal conditions
- Twin adjustable antennas provide clear radio frequency reception

Product Technical Specifications

Receiver

- Carrier wave frequency range: UHF 668-692 MHz
- Oscillation mode: Phase-locked loop controlled
- Carrier wave stability: 10PPM
- Switching bandwidth: 24MHz
- Frequency space: $\geq 250\text{KHz}$
- Sensitivity: $-105\text{dB @ sinad}=12\text{ dB}$
- S/N Ratio: $>105\text{dB}$ – T.H.D.: $<0.5\% @ 1\text{KHz}$
- Image rejection: 85 dB typical

- Spurious rejection: 75 dB typical
- Frequency responses: 40Hz~18KHz
- Capable distance: Up to 200 feet
- Squelch control: dual-squelch circuit
- AF output impedance: $2.2\text{K}\Omega$
- Maximum output level: Balanced, 0-400mv; unbalanced, 0-200mv
- Display type: LED
- Power: External Power Supply Output, 800mA, 14V DC
- Output connectors: XLR balanced socket, 1/4-inch unbalanced socket
- Receiver dimensions (inches): 16.5(L) \times 1.75(H) \times 8(D)
- Receiver weight (lbs): approx. 6

Microphone/Transmitter

- Transmitter power: 30mW
- Spurious emission: $<40\text{dB}$ (with carrier)
- Display: LED
- Battery voltage: $1.5\text{v} \times 2$
- Battery life: Up to 8 hours

Charging Station

- Dual-well docking station
- Power: External Power Supply Output, 800mA, 14V DC
- Charging time: Up to 5 hours

Troubleshooting

If you are having technical difficulties operating the UHF-4000R system, please check the troubleshooting list below to resolve any issues of incorrect operation. If you suspect an equipment malfunction and are unable to resolve the problem, please contact your dealer or Acesonic USA Inc. at (626) 820-0645 or send an e-mail to techsupport@acesonic.com.

Problem	Possible causes	Solution
Receiver <i>(No sound or lights)</i>	<ul style="list-style-type: none"> • AC adapter not plugged in • Power button is in OFF position • Power LED does not light up 	<ul style="list-style-type: none"> • Plug in AC adapter • Press “1” on the power switch • Contact Acesonic Technical Support
Microphone <i>(No sound)</i>	<ul style="list-style-type: none"> • Transmitter out of range • Microphone switched off or muted • Channel volume is turned down • Batteries in the microphone are weak or not installed properly • Receiver is not connected to an amplifier, mixer or player 	<ul style="list-style-type: none"> • Bring the microphone closer to the receiver • Press the ON/MUTE button so that the indicator light turns GREEN • Slowly turn up the microphone’s channel volume control • Make sure batteries are charged and installed correctly • Connect receiver to the appropriate audio input of your amplifier or karaoke player. If you have a corded microphone, test your amplifier/player to make sure that it’s operating correctly.
Sound <i>(distortion or feedback)</i>	<ul style="list-style-type: none"> • Too close to speakers • Microphone batteries are running low • Unused microphones are on • Other electrical interference 	<ul style="list-style-type: none"> • Move away from speakers • Change batteries • Turn off or turn down volume of all unused microphones • Move receiver away from other devices

Safety, warnings and cautions

Mises en garde, précautions et procédures de sûreté



The lightning-with-arrowhead symbol inside a triangle alerts the user that potentially dangerous voltage in the product enclosure may constitute a risk of electric shock.



The exclamation point within a triangle alerts the user to important operating, maintenance, and servicing information in this User Manual.

CAUTION

To reduce the risk of electrical shocks, fire, and possible injuries, you should not

- remove screws, buttons, antennae, jacks, or any part of the enclosure; or
- expose the product to rain or moisture.

FCC ADVISORY (U.S.A.)

1. 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 correcting the problem by one or more of the following measures:

- Reorienting and/or relocating the receiving antennae
- Increasing the distance between the radio/TV equipment and the UHF-4000R
- Connecting the radio/TV equipment to an outlet on a different circuit than the one into which the receiver is plugged
- If necessary, consulting the dealer or an experienced radio/TV technician for help

2. **IMPORTANT:** When connecting the UHF-4000R to audio equipment, use only high-quality, shielded cables such as what is supplied with this product. Follow all installation instructions do not modify the equipment in any way, as this could void your FCC authorization to use the device in the U.S.

FOR CANADA/POUR LE CANADA

Caution: To prevent electric shock, match the wide blade of the plug to the wide slot, and fully insert.

Attention: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

This product does not exceed the Class B limits for radio noise emissions from digital devices as set out in the Canadian standard for interference-causing equipment ("Digital Apparatus, ICES-003" from the Department of Communications).

Cet appareil numérique respecte les limites de bruits

radio électriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur ("Appareils Numériques, NMB-003" édictée par le Ministre des Communications).

Important safety instructions

1. Read and follow these instructions, keep them handy for reference, familiarize yourself with the product's operation, and heed all safety warnings.
2. Do not use this product near water, on wet surfaces, or in places where moisture may accumulate. Do not expose the device to dripping or splashing, and do not place items filled with liquids – such as vases, beverages, etc. – on top of the device. Clean only with a dry cloth.
3. Do not block any ventilation openings or set device on carpets or rugs. Maintain sufficient room on all sides for airflow.
4. Do not position the device on or near radiators, stoves, or other electrical equipment (such as amplifiers) that produce heat.
5. Do not defeat the safety purpose of a polarized or grounding-type plug. A polarized plug has two blades with one wider than the other, while a grounding-type plug has two blades and one prong. The wide blade and the prong are safety features. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
6. Protect the power cord from being walked on or pinched, particularly where it is plugged in to an electrical socket and the point where it exits from the rear of the device.
7. Only use the attachments and accessories specified by the manufacturer.
8. Use only with a cart, stand, tripod, bracket or table specified by the manufacturer or sold with the device. When using a cart, use caution when moving the cart.
9. Unplug the product during lightning storms or when it will not be used for long periods of time.
10. Refer all servicing to qualified service personnel. Servicing is required when the unit has been damaged

in any way, such as when the power-supply cord or plug is damaged, liquids have been spilled or objects introduced into the enclosure, the device has been exposed to rain or moisture, the product does not operate normally or it has been dropped.

11. Never push objects of any kind into this product, through jacks or other openings, as they may contact dangerous voltage points or short-circuit components, thus causing fire or electrical shock.

12. This product should be operated only from the type of power source indicated on the product label and in this User Manual. If you are not sure of the type of power supplied to your home, consult your product dealer or local utility.

13. An outside antenna system should not be located in close proximity to overhead power lines, or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful not to touch such power lines or circuits, as contact with them could be fatal.

14. Do not overload wall outlets or extension cord as this can increase the risk of fire, power outages or electrical shock.

15. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or with the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

16. Following any servicing or repair of this product, ask the service technician to perform the appropriate safety checks to ensure the product is in proper operating condition.

17. The product should not be mounted to a wall or ceiling except as recommended by the manufacturer, with a mounting accessory recommended by the manufacturer.

18. If your product is not operating correctly or exhibits a marked change in performance, and you are unable to restore normal operation by following procedures in this User Manual, do not attempt to service it yourself. Opening the enclosure may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

: NOTE: With the proper care and maintenance, your
: UHF-4000R Professional UHF 4-Channel Wireless
: Rechargeable Microphone System will give you years
: of dependable, enjoyable use. Make sure you are using
: freshly charged batteries and good (unfrayed) cables at
: all times.

UHF-4000R
Professional UHF 4-Channel Wireless
Rechargeable Microphone System

One (1) Year Manufacturer Warranty
Lifetime Technical Support
Designed in U.S.A.

Technical Support:
Call: (626) 820-0645
Email: techsupport@acesonic.com
Website: www.acesonic.com

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