AMERICAN AUDIO

UHF SERIES | UHF 510-556MHz

PROFESSIONAL WIRELESS MICROPHONE SYSTEM

WU-419V

User Manual

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DOCUMENT VERSION

Please check http://www.adj.com for the latest revision/update of this manual.

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01/05/17	1.4	Updated version with correct web/email links.

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GENERAL INFORMATION

INTRODUCTION

This rack mountable UHF wireless microphone system has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important information regarding safety during use and maintenance.

UNPACKING

Every device has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your device for damage and be sure all accessories necessary to operate the device have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this device to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

BOX CONTENTS

- (1) 4 Channel UHF Wireless Receiver
- (4) Hand Held Wireless Microphones
- (2) UHF Antennas
- (1) ¼ inch Male to ¼ Male Audio Patch Cable
- (1) External Power Supply

CUSTOMER SUPPORT

AMERICAN AUDIO® provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at http://www.adj.com for any comments or suggestions. For service related issue please contact us.

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WARRANTY REGISTRATION

Please complete and mail in the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support.

IMPORTANT NOTICE!

There are no user serviceable parts inside this device. Do not attempt any repairs yourself; doing so will void your manufactures warranty. Damages resulting from modifications to this fixture and/or the disregard of safety and general user instructions found in this user manual void the manufactures warranty and are not subject to any warranty claims and/or repairs.

LIMITED WARRANTY

A. American Audio® hereby warrants, to the original purchaser, American Audio® products to be free of manufacturing defects in material and workmanship for a period of 1 Year (365 days) from the date of purchase. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the American Audio® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, American Audio® will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, American Audio® shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which American Audio® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the American Audio® factory unless prior written authorization was issued to purchaser by American Audio®; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. During the period specified above, American Audio® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of American Audio® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of American Audio®. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.

E. American Audio® reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by American Audio® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall American Audio® be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

G. This warranty is the only written warranty applicable to American Audio® products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

SAFETY INSTRUCTIONS AND GUIDELINES

To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. The manufacturer of this device is not responsible for injury and/or damages resulting from the misuse of this device due to the disregard of the information printed in this manual. Any modifications to the device and/or the accessories included will void the original manufactures warranty and increase the risk of damage and/or personal injury.

NEVER OPEN THIS DEVICE WHILE IN USE!

DO NOT PLUG DEVICE INTO A DIMMER PACK!

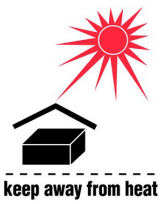
UNPLUG POWER BEFORE CLEANING DEVICE!

CLEAN ONLY WITH A DRY CLOTH!

KEEP FLAMMABLE MATERIALS AWAY FROM DEVICE!

INDOOR / DRY LOCATIONS USE ONLY!

DO NOT EXPOSE DEVICE TO RAIN OR MOISTURE!



DO NOT EXPOSE DEVICE TO:

HIGH TEMPERATURE OR HIGH HUMIDITY ENVIRONMENTS!

AMBIENT OPERATING TEMPERATURE: 23° to 113°F. (-5° to 45°C)

DO NOT USE DEVICE IF BATTERIES ARE DAMAGED, DEFORMED, OR HAVE AN ODOR!

DO NOT DISASSEMBLE BATTERIES!

DISPOSE OF BATTERIES ACCORDING TO LOCAL, STATE, AND COUNTRY REGULATIONS!

SAFETY INSTRUCTIONS AND GUIDELINES

- **DO NOT** shake device, avoid brute force when operating device.
- **DO NOT** operate device if the power cord has become frayed, crimped and/or damaged. If the power cord is damaged, replace it immediately with a new one of similar power rating.
- **ONLY** use accessories that are specified by the manufacturer.
- The device should be serviced and repaired by authorized personnel only.
- Use the original packaging and materials to transport the fixture in for service.

FCC CONSUMER ALERT (U.S.)

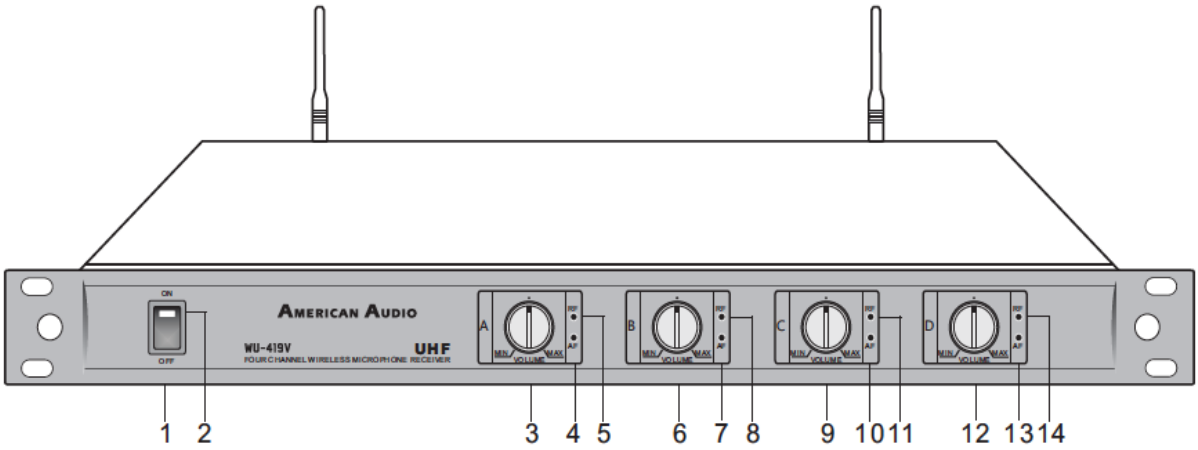
A license is not required to operate this wireless microphone system.

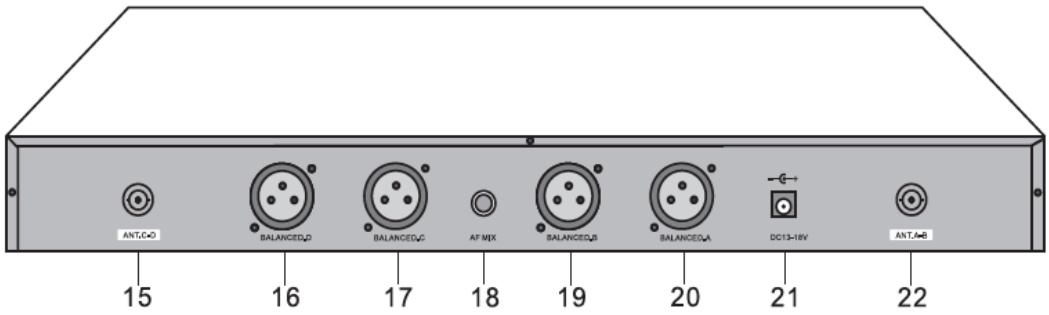
However operating this microphone system is subject to certain restrictions: the system may not cause harmful interference; it must operate at a low power level (not in excess of 50 milliwatts); and it has protection from interference received from any other device. Users of this wireless system should also be aware that the FCC is currently evaluating the use of wireless microphone systems, and these rules are subject to change.

FOR MORE INFORMATION, CALL THE FCC AT 1-888-CALL-FCC (TTY: 1-888-TELL-FCC) OR VISIT THE FCC'S WIRELESS MICROPHONE WEBSITE BELOW.

www.fcc.gov/cgb/wirelessmicrophones

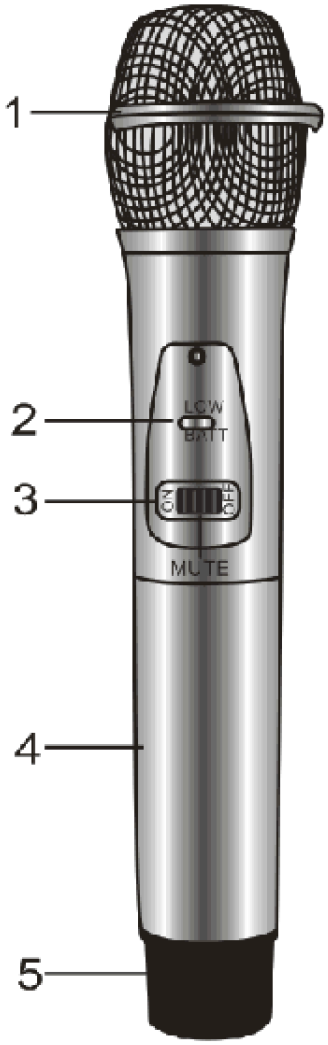
OVERVIEW - WIRELESS RECEIVER





1. Power Switch
2. Power LED Indicator
3. CH-A Volume Control Dial
4. CH-A Audio LED Indicator
5. CH-A Signal LED Indicator
6. CH-B Volume Control Dial
7. CH-B Audio LED Indicator
8. CH-B Signal LED Indicator
9. CH-C Volume Control Dial
10. CH-C Audio LED Indicator
11. CH-C Signal LED Indicator
12. CH-D Volume Control Dial
13. CH-D Audio LED Indicator
14. CH-D Signal LED Indicator
15. CH-C+D Antenna Input
16. CH-D Balanced 3pin XLR Audio Output
17. CH-C Balanced 3pin XLR Audio Output
18. CH-A+B+C+D ¼" Audio Mix Output
19. CH-B Balanced 3pin XLR Audio Output
20. CH-A Balanced 3pin XLR Audio Output
21. DC Power Supply Input
22. CH-A+B Antenna Input

OVERVIEW - HANDHELD MICROPHONE TRANSMITTERS



1. Grill

2. Battery State Indicator

3. Power and Audio Mute Switch

4. Battery Compartment Cover

5. Antenna / Color Ring

INSTALLATION LOCATION GUIDELINES

There are many factors that can affect and/or interrupt the wireless UHF signal. These factors can include walls, glass, metal objects and surfaces, other digital or electronic devices (CD/DVD/Media players, computers, laptops, Wi-Fi devices, cell phones, wireless phones, two-way radio communication devices, and wireless remote controls), electronic appliances, and people.

Therefore it is highly recommended to position the wireless receiver away from the above-mentioned items and a minimum of **3.0 ft. (1m)** above audiences and/or above ground level. Careful planning and testing of the selected installation location is critical to ensure optimum and reliable wireless operation.

OPERATION - WIRELESS RECEIVER

1. Place receiver on a flat non-metal surface or install in an equipment rack.
2. Connect both included UHF antennas to the receiver.
3. Position both UHF antennas vertically and ensure they are fully extended.
4. Connect included power supply to the receiver and then plug into power outlet.
5. Adjust the volume control dials for each of the 4 channels accordingly.

OPERATION - WIRELESS HANDHELD MICRPHONES

1. Unscrew the battery compartment cover and Insert batteries as indicated.
2. Screw the battery compartment cover securely.
3. To power on the microphone, switch the power switch to the far left ON position.
4. To mute microphone, switch the power switch to center MUTE position.
5. To power off the microphone, switch the power switch to the far right OFF position.

TROUBLE SHOOTING TIPS

PROBLEM	POSSIBLE CAUSE	REMEDY
NO Sound	1. AC Adapter not connected to Receiver or power source. 2.Receiver is OFF. 3. Receiver is not connected to mixer or amplifier. 4. Volume control on Receiver is at zero. 5. Transmitter and Receiver color codes are not identical. 6. Transmitter ON/OFF switch is at "OFF" or "MUTE" 7. Transmitter batteries are not inserted properly. 8. Transmitter batteries are dead. 9. Receiver is invisible from Transmitter location. 10. Receiver is too close to metal objects.	1. Connect AC Adapter to Receiver and/or power source. 2. Turn power switch to ON position. 3. Connect Receiver output to mixer and/or amplifier input. 4. Turn Volume control dial clockwise. 5. Use a Transmitter and a Receiver with identical color codes. 6. Set Transmitter ON/OFF switch to "ON" 7. insert batteries in the corresponding direction as indicated by "+" and "-". 8. Replace batteries. 9. Relocate the Receiver to a direct line of sight location to the Transmitter. 10. Keep Receiver away from metal objects that may cause interference.
Noise, Crackling, Unwanted Signals	1. Antenna location. 2. Interference from TV, Radio, or defective electrical appliances or installations.	1. Relocate the Receiver to a direct line of sight location to the Transmitter. 2. Power off interference sources and/or defective appliances or change the frequency used by these devices.
Distortion	1. Interference from other wireless systems, TV, Radio, or defective electrical appliances or installations.	1. Power off interference sources and/or defective appliances or change the frequency used by these devices.
Momentary loss of sound at some locations within performance area	1. Antenna location.	1. Relocate the Receiver to a direct line of sight location to the Transmitter. If dead spots persist, mark these areas and avoid performing in or around them.

TECHNICAL SPECIFICATIONS

PERFORMANCE

Carrier Frequency: UHF 510-556MHz
Frequency Stabilization: < 20PPM
Dynamic Range: >95dB
Total Harmonic Distortion: <0.5%
Frequency Response: 40Hz ~ 18Hz 3dB
Audio Output Level: 0-400mV (Balanced: 0-2V)
Range: 262 ft. (80m) Unobstructed Line of Sight | 164 ft. (50m) Within a Room*
*Actual range varies based on line of sight, UHF signal retention and interference.
⦸SLA Factor

RECEIVER

Power Supply: 110V
DC Power Supply DC: 13-18V
Max Power Consumption: 4W
Signal/Noise Ratio: >98dB
Image and Spurious Rejection: >80dB
Border Upon Channel Rejection: >80dB
Sensitivity: >5dBu (SINAD=20dB)

TRANSMITTER

Power: 10mW
Modulation Type: FM
Max Deviation: 30KHz
Spurious Emission: 50dB
Battery Voltage: 1.5V x2
Battery Life with Full Charge: 6-10 Hours

CONTROL / CONNECTIONS

(4) Rotary Channel Volume Dials
(4) Channel Signal LED Indicators
(4) 3pin Balanced XLR Audio Inputs
(2) BNC Antenna Inputs
(1) ¼" Mix Audio Patch Output
(1) Power Switch
(1) Power Supply Input

RECEIVER SIZE / WEIGHT

Length: 19.0" (482.6mm)
Width: 10.4" (260.35mm)
Height: 1.9" (49mm)
Weight: 4.25 lbs. (1.9 kg)

ELECTRICAL

DC13-18V

Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

OPTIONAL ACCESSORIES

ORDER CODE	ITEM
XL-3	3 ft. (0.9m) 3pin Microphone Cable
XL-6	6 ft. (1.8m) 3pin Microphone Cable
XL-12	12 ft. (3.6m) 3pin Microphone Cable
	Additional Cable Lengths Available