



Notes:



AWM6039U

**USB POWERED
PROFESSIONAL UHF DUAL CHANNEL
WIRELESS MICROPHONE SYSTEM
WITH ADJUSTABLE FREQUENCIES**

OWNER'S MANUAL





Thank you for purchasing the **Audio2000's®** USB powered professional UHF dual channel wireless microphone system with adjustable frequencies! For the best results and the utmost satisfaction from your new unit, please read this manual thoroughly, and retain it for future reference. For more information, please visit our website (www.audio2000s.com).

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WARNING

- * TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
- * THIS APPLIANCE SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING WATER AND THAT NO OBJECT FILLED WITH LIQUIDS SUCH AS VASES SHALL BE PLACED ON APPARATUS.

 <p>This lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.</p>	<p style="text-align: center;">CAUTION</p> <p style="text-align: center;">RISK OF ELECTRIC SHOCK</p> <p style="text-align: center;">DO NOT OPEN</p> <p>Warning: To reduce the risk of electric shock, do not remove cover (or back) no user-serviceable parts inside. Refer servicing to qualified service personnel.</p>	 <p>The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p>
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IMPORTANT SAFETY INSTRUCTIONS

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) 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.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) 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.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) 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.
- 15) Grounding or Polarization: This product may be equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 16) Ventilation slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 17) The MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

PRECAUTIONS

On Safety

- * Operate only on designated AC power supply (120V AC in North America).
- * Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- * Unplug the unit from the wall outlet or set the Master switch to OFF if it is not to be used for several days.
- * To disconnect the cord, pull it out by the plug. Never pull the cord itself.

On Installation

- * Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- * Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.

On Repackaging

Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it as it was originally packed at the factory.

PACKAGE CONTENTS

<u>Items</u>	<u>Quantities</u>
AWR6039U Receiver	1
Wireless Transmitters (AWX6038U's)	
Combinations of Two of the Following Devices:	
Wireless Handheld Microphone	
Wireless Lavalier Microphone	
Wireless Headset Microphone	
AC/DC5V Mini USB Power Supply Cable (USB Power Supply Cable)	1
1/4" to 1/4" Microphone Cable	1
AA Batteries	4
Owner's Manual	1

AWM6039U SYSTEM

FEATURES

1. UHF Band Frequencies
2. PLL (Phase Lock Loop) 16 + 16 Adjustable Frequencies
3. Including Two Wireless Transmitters (Combinations of Two of the Following Devices: Wireless Handheld Microphone, Wireless Lavalier Microphone, Wireless Headset Microphone)
4. Integrated Antenna for Effective RF Output and High Transmission Quality
5. Two Independent Balanced XLR outputs and One Mixed Unbalanced 1/4" Output
6. Two Independent Volume Control Knobs (One for Each Channel)
7. Two RF Level Meters and Two AF Level Meters
8. Infrared Frequency Synchronization
9. Battery Capacity Indicator
10. Rugged Mini Receiver Chassis
11. Operating Range up to 100ft
12. DC5V Power Supply

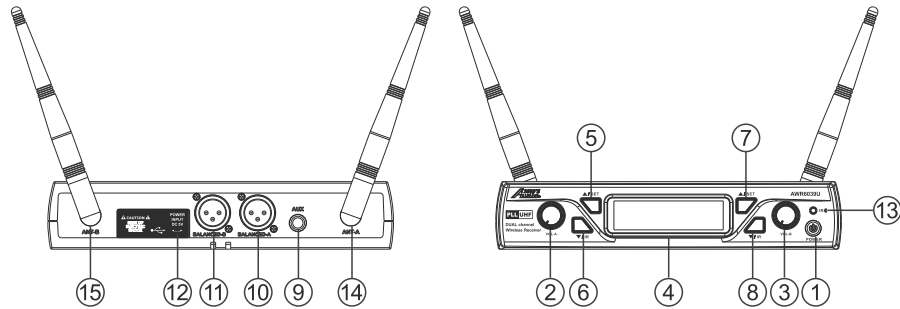
SYSTEM CONFIGURATIONS

- AWM6039U - Comprising an AWR6039U receiver and two wireless handheld microphones
- AWM6039UH - Comprising an AWR6039U receiver and two wireless headset microphones
- AWM6039UL - Comprising an AWR6039U receiver, one wireless handheld microphone, and one wireless lavalier microphone
- AWM6039UM - Comprising an AWR6039U receiver and two wireless lavalier microphones

Note: A wireless lavalier microphone of the wireless system comes with a lavalier microphone and a body-pack transmitter (AWX6038UM).
A wireless headset microphone of the wireless system comes with a headset microphone and a body-pack transmitter (AWX6038UH).

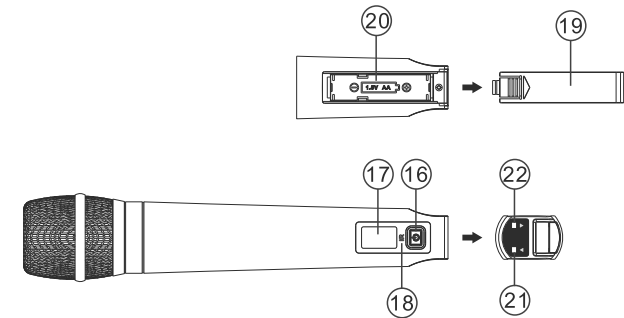
SYSTEM FUNCTIONS

RECEIVER (AWR6039U)



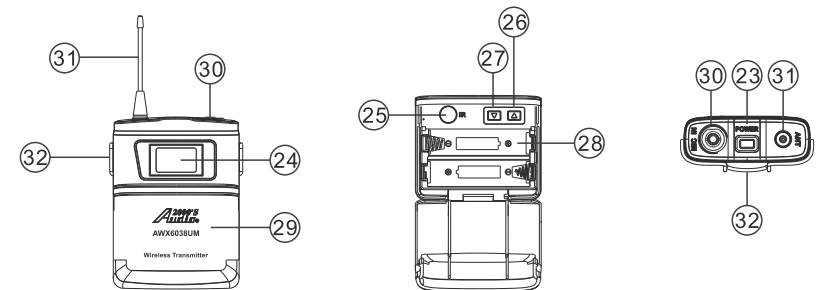
1. **POWER** --- This is a power on/off button. When the receiver power is off, press and hold this button to turn on the power. When the receiver power is on, press and hold this button to turn off the power.
2. **VOL-A** --- This is the volume control for channel A.
3. **VOL-B** --- This is the volume control for channel B.
4. **LED Display** --- This LED display shows the channel(A or B) frequencies, channel numbers, AF meters, RF meters, and battery capacities of the transmitters.
5. **▲/SET button** --- Press this button to adjust the channel A frequency upwards. To adjust the frequency, press and hold this "▲" button until the channel number starts to flash. While the channel number is flashing, press this "▲" button to raise the frequency or press the "▼" button (6) to lower the frequency.
6. **▼/IR button** --- Press this button to adjust the channel A frequency downwards. To adjust the frequency, press and hold the "▲" button (5) until the channel number starts to flash. While the channel number is flashing, press the "▲" button to raise the frequency or press this "▼" button to lower the frequency. This button is also used for synchronizing the channel A transmitter frequency to the receiver channel A frequency through the IR signal.
7. **▲/SET button** --- Press this button to adjust the channel B frequency upwards. To adjust the frequency, press and hold this "▲" button until the channel number starts to flash. While the channel number is flashing, press this "▲" button to raise the frequency or press the "▼" button (8) to lower the frequency.
8. **▼/IR button** --- Press this button to adjust the channel B frequency downwards. To adjust the frequency, press and hold the "▲" button (7) until the channel number starts to flash. While the channel number is flashing, press the "▲" button to raise the frequency or press this "▼" button to lower the frequency. This button is also used for synchronizing the channel B transmitter frequency to the receiver channel B frequency through the IR signal.
9. **Mixed Unbalanced 1/4" Output** --- This is a mixed output for channels A and B.
10. **Balanced XLR Output A** --- This is an independent balanced XLR output for channel A.
11. **Balanced XLR Output B** --- This is an independent balanced XLR output for channel B.
12. **DC5V Mini USB Power Supply Jack (USB Jack)**.
13. **IR** --- This is an IR (infrared) signal transmitter for synchronizing the transmitter frequency to the receiver frequency.
14. **ANT-A** --- This is the antenna for channel A.
15. **ANT-B** --- This is the antenna for channel B.

TRANSMITTER - HANDHELD MICROPHONE (AWX6038U)



16. **Power On/Off Button** --- When the handheld microphone power is off, press and hold this button to turn on the power. When the handheld microphone power is on, press and hold this button to turn off the power.
17. **LED Display** --- This LED display shows the frequency, channel number, RF signal indicator, and battery capacity.
18. **IR Reception Window**
19. **Battery Cover**
20. **Battery Compartment**
21. **▲ button** --- Press this button to adjust the frequency upwards.
22. **▼ button** --- Press this button to adjust the frequency downwards.

TRANSMITTER - BODY-PACK (AWX6038UH or AWX6038UM)



23. **Power On/Off Button** --- When the body-pack transmitter power is off, press and hold this button to turn on the power. When the body-pack transmitter power is on, press and hold this button to turn off the power.
24. **LED Display** --- This LED display shows the frequency, channel number, and battery capacity.
25. **IR Reception Window**
26. **▲ button** --- Press this button to adjust the frequency upwards.
27. **▼ button** --- Press this button to adjust the frequency downwards.
28. **Battery Compartment**
29. **Battery Cover**
30. **MIC IN** --- This is the microphone input for a lavalier microphone or a headset microphone.
31. **Antenna**
32. **Belt clip**

QUICK SETUP

A. Remove packing material

B. Install the receiver (AWR6039U)

1. Place the receiver at a location at least 3.5 feet away from the ground and all the walls. Also, keep the receiver away from any electro-magnetic noise sources as far away as possible.
2. Plug the USB connector of the supplied USB power supply cable to the receiver's USB Jack (12), and then plug the AC input of the supplied USB power supply cable to a 120V outlet (North America).
3. Set the antennas up right. Make sure that any of the antennas is not enclosed in a large metal body.
4. Connect the outputs of the receiver to microphone inputs of a mixer or a sound system. In order to do so, (1) you could use the supplied microphone cable (a cable with ¼" connectors on both ends) to connect from the unbalanced output (an ¼" jack) to an ¼" microphone input on a mixer or a sound system; or (2) you could get two balanced microphone cables (cables with a male XLR connector at one end and a female XLR connector on the other end; not included in the package) to connect from both the balanced outputs (male XLR jacks) to two balanced microphone inputs (female XLR jacks) on a mixer or a sound system.
5. Both the ¼" output and the XLR balanced outputs on the rear panel of the receiver are to be connected to microphone inputs only.
6. Press the power on/off button (1) on the receiver to turn on the power.
7. Turn both volume control knobs (2 and 3) to the minimum position.
8. Press and hold the "▲" button (5) until the channel number starts to flash. While the channel number is flashing, press the "▲" button to raise the Channel A frequency or press the "▼" button (6) to lower the channel A frequency.
9. Press and hold the "▲" button (7) until the channel number starts to flash. While the channel number is flashing, press the "▲" button to raise the channel B frequency or press the "▼" button (8) to lower the channel B frequency.

C. Set up the transmitters

(a) Set up the wireless handheld microphone (AWX6038U)

1. Open the battery cover (19) by sliding the battery cover in the direction away from the grille windscreen.
2. Place two 1.5V AA batteries into the battery compartment (20) with the battery orientations as indicated.
3. Press and hold the power on/off button on the handheld microphone to turn on the power. Once the handheld microphone power is turned on, there are two methods to synchronize the handheld microphone frequency to the receiver frequency:
 - (I) After the receiver is turned on, press and hold the "▼/IR" button (6 or 8) on the receiver and the IR icon will start to flash on the receiver LED display (4). While the IR icon is flashing, face the IR reception window (18) on the handheld microphone toward the IR signal transmitter (13) on the receiver until the RF meter on the receiver LED display (4) shows RF signals.
 - (II) Press the "▲" button (21) or the "▼" button (22) at the bottom of the handheld microphone body to adjust the microphone frequency upwards or downwards until the microphone frequency is the same as one of the receiver frequencies.
4. Close the battery cover.

(b) Set up the body-pack transmitter (AWX6038UH or AWX6038UM)

1. Open the battery cover (29) by using two fingers to press and pull the battery cover to swing open.
2. Place two 1.5V AA batteries into the battery compartment (28) with the battery orientations as indicated.
3. Press and hold the power on/off button on the body-pack transmitter to turn on the body-pack transmitter power. Once the body-pack transmitter power is turned on, there are two methods to synchronize the body-pack transmitter frequency to the receiver frequency:
 - (I) After the receiver is turned on, press and hold the "▼/IR" button (6 or 8) on the receiver and the IR icon will start to flash on the receiver LED display (4). While the IR icon is flashing, face the IR reception window (25) on the body-pack transmitter toward the IR signal transmitter (13) on the receiver until the RF meter on the receiver LED display (4) shows RF signals.
 - (II) Press the "▲" button (26) or the "▼" button (27) to adjust the body-pack transmitter frequency upwards or downwards until the body-pack transmitter frequency is the same as one of the receiver frequencies.
4. Close the battery cover.
5. Connect the lavalier microphone or the headset microphone to the body-pack transmitter to be a wireless lavalier microphone or a wireless headset microphone.

D. Set up the wireless microphone system (AWM6039U)

The AWR6039U is a two-channel receiver. Repeat section C (a) or C (b) for the second handheld microphone or body-pack transmitter. Once both transmitters are set up, the AWM6039U system is ready to be used.

Specification

Receiver

Frequency Range	500MHz Range
Frequency Channels.....	16 Channels
Modulation Model	pi/4 DQPSK
SNR	96db
Sensitivity	-96dbm
Frequency Response	30~20KHz
Channel Interval	600KHz
T.H.D.	0.03%
Output Impedance	600Ω
Power Supply	5V
Power Consumption	<85mA
LED Display	

Handheld Microphone Transmitter

Power Output	10dbm
Frequency Response	30KHz~20KHz
Power Supply	3V

Body-Pack Transmitter

Power Output	10dbm
Frequency Response	30KHz~20KHz
Power Supply	3V

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
No sound	Receiver is off.	Turn on receiver.
	Transmitter power switch is off.	Turn on transmitter power switch.
	No battery or bad battery in transmitter.	Insert or replace battery.
No sound and no RF signal	Incorrect AA-battery polarity in the transmitter.	Correct the AA-battery polarity.
	Antenna is not on the receiver or bad antenna connection.	Install the antenna or check the antenna connection.
	Transmitter too far away from the antenna or RF signal blocked.	Reposition the transmitter to closer area or remove the RF signal block.
No sound while RF and AF signals normal.	Receiver volume turned to minimum.	Adjust the volume control knob to have an optimal volume output.
	Receiver audio cable is missing or defective.	Connect, repair or replace the audio cables.
	Volume control of the sound system connected to the receiver is set to minimum.	Adjust the volume control on the sound system which is connected to the receiver.
No sound while RF signal is normal and AF signal does not exist.	The microphone cartridge of the transmitter is defective.	Return transmitter to factory or authorized service station for service.
Loud noise from receiver only when the transmitter is off.	Interference signal at that frequency.	Reposition receiver or adjust the antenna orientation.
		Select another operating frequency.
	Receiver is placed too close to an interference source, such as a computer, digital device, or CD player.	Move the receiver to another location. Select another operating frequency.
Loud noise from receiver even when the transmitter is on.	Another transmitter is using the same frequency.	Turn off another transmitter or change to a channel with a different frequency.
	Interference signal at that frequency.	Select another operating frequency.
	Receiver is placed too close to an interference source, such as a computer, digital device, or CD player.	Move the receiver to another location. Select another operating frequency.
Distorted sound	Low transmitter battery level.	Replace transmitter battery.
	The volume control on the receiver is set too high, overloading the subsequent sound device input.	Turn down the volume control on the receiver.
Short range or signal dropouts.	Low transmitter battery level.	Replace transmitter battery.
	Poor antenna reception.	Reposition antenna or receiver.
	Interference Signal	Select another operating frequency.
Momentary loss of sound when transmitter is moved around the performing area.	Too many obstacles between the receiver and transmitter.	Move the obstacles or move the receiver away from nearby metal objects.
	Radio frequency (RF) blind spots.	Reposition the receiver. If the momentary loss of sound problem cannot be removed, walk through the performing area and mark "Blind" spots. Avoid these "Blind" spots during performance.

SERVICE INFORMATION

SHIPPING DAMAGE

If the shipping carton is found to be damaged, notify the delivery company immediately. Save the damaged carton as evidence for the delivery company to inspect. It is the responsibility of the shipper to file a claim with the delivery company for any damaged that occurs during shipping. In the case that the shipping carton is in good condition but the unit is damaged or defective, call H & F Technologies, Incorporated, U.S.A. at 805-523-2759.

WARRANTY PERIOD

For the period of one (1) year from date of original retail or online purchase for parts and 90 days for labor (the Warranty period) from an authorized **Audio2000'S®** dealer, H & F Technologies, Incorporated, U.S.A., warrants that products distributed by H & F Technologies, Incorporated in the U.S.A. that fail to function properly under normal use due to manufacturing defect when installed and operated according to the owner's manual instructions enclosed with the unit will be repaired or replaced with a new or reconditioned product with comparable value, at the discretion of H & F Technologies, Incorporated, without charge to you for parts or actual repair work. Parts supplied under this warranty may be new or rebuilt at the option of H & F Technologies, Incorporated.

This Warranty period for retail or online customers commences upon the date of retail sale, online sale, or the time that the product is first put into use, whichever occurs first.

This Warranty is valid for 90 days for parts and labor from the date of purchase on any product which is used in any trade or business, or in an industrial or commercial application.

PRODUCT

This warranty covers the product during the warranty period with the proof of purchase only. In the event service is required, call H & F Technologies, Incorporated at 805-523-2759 for a Return Authorization number (RA number) and the product must be delivered within the Warranty period, transportation prepaid by the product owner from within the United States. You will be responsible for removal and installation of the product. H & F Technologies, Incorporated will pay for the standard shipping cost for returning the product to you within the continental United States for all necessary repairs or replacements which are covered by the warranty.

No liability will be accepted for damages or loss directly caused from the use of this product. H & F Technologies, Incorporated's liability shall be limited to the repairs or replacements of this product if found to be defective.

WHAT'S NOT COVERED

- 1) Any damage to the products resulting from alteration, modifications not authorized in writing by H & F Technologies, Incorporated, misuse or abuse, neglect, accident, improper installation, damage due to lightning or due to power surges, subsequent damage from leaking, damaged or inoperative batteries or the use of batteries not conforming to those specified in the owner's manual instructions.
- 2) The cost of parts or labor, which would be otherwise provided without charge under this warranty, obtained from any source other than a H & F Technologies, Incorporated Authorized Service Company or other designated location. This warranty does not cover defects or damages caused by the use of unauthorized parts or labor, or from improper maintenance.
- 3) Normal wear and tear of this product, including but not limited to headset and lapel microphones, earphone ear cushions, microphone clip, and microphone mesh grille.
- 4) Any product that has been used as a rental unit.