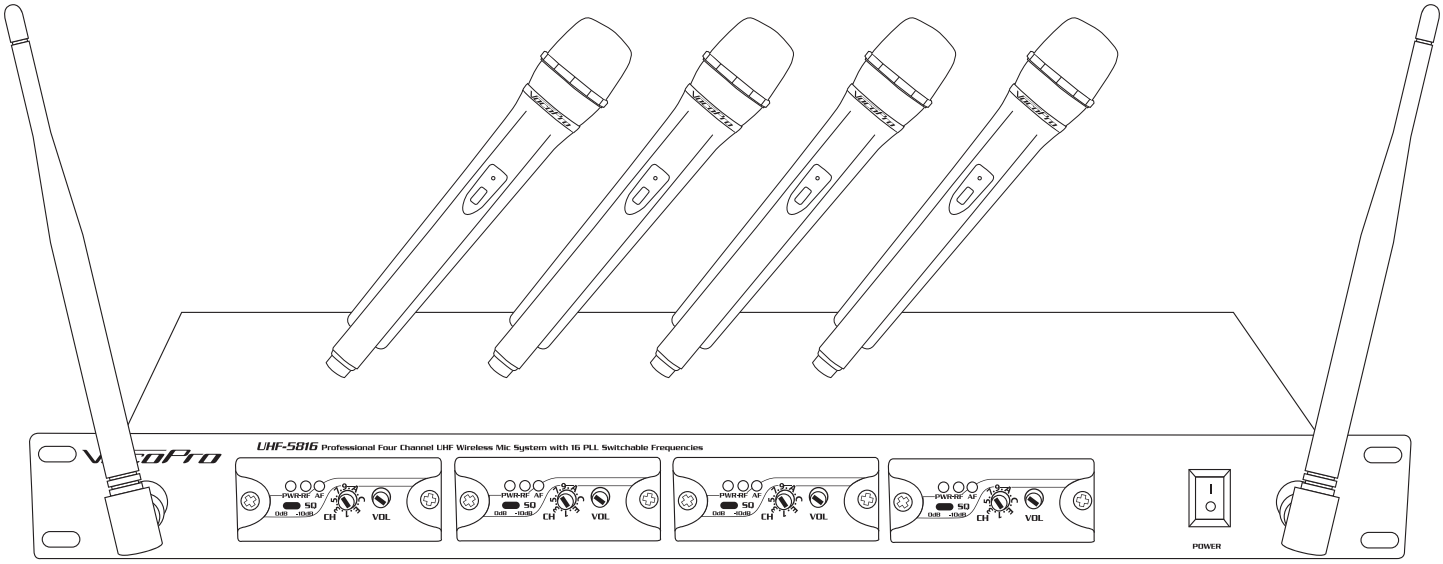
VocoPro®

PROFESSIONAL VOCAL SYSTEMS™



UHF-5816

Professional 4 Channel UHF PLL Wireless Mic System with 16 Switchable Frequencies

owner's manual

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Safety Instructions

CAUTION
RISK OF SHOCK

CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Only refer servicing to qualified service personnel.

Explanation of Graphical Symbols

The lightning flash & arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of danger.

The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and servicing instructions.

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

1. **Read Instructions** - All the safety and operating instructions should be read before the appliance is operated.

2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.

3. **Heed Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.

4. **Follow Instructions** - All operating and use instructions should be followed.

5. **Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.

6. **Water and Moisture** - Do not use this unit near water. For example, near a bathtub or in a wet basement and the like.

7. **Carts and Stands** - The appliance should be used only with a cart or stand that is recommended by the manufacturer.

7 A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause an overturn.

8. **Ventilation** - The appliance should be situated so its location does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation slots.

9. **Heat** - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

10. **Power Sources** - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

11. **Grounding or Polarization** - Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

12. **Power-Cord Protection** - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

13. **Cleaning** - Unplug this unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

14. **Power lines** - An outdoor antenna should be located away from power lines.

15. **Nonuse Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

16. **Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

17. **Damage Requiring Service** - The appliance should be serviced by qualified service personnel when:

A. The power supply cord or plug has been damaged; or
B. Objects have fallen into the appliance; or
C. The appliance has been exposed to rain; or
D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
E. The appliance has been dropped, or the enclosure damaged.

18. **Servicing** - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Note:
To CATV system installer's (U.S.A.): This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected as close to the point of cable entry as practical.

FCC Information

1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!: This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Vocopro may void your authority, granted by the FCC, to use this product.

2. IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable(s) supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the U.S.A.

3. NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurances that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the owner's manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "Off" and "On", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Use power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter(s).

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300-ohm ribbon lead, change the lead-in to coaxial type cable.

If these corrective measures do not produce satisfactory results, please contact your local retailer authorized to distribute Vocopro products. If you can not locate the appropriate retailer, please contact Vocopro, 1728 Curtiss Court, La Verne, CA 91750.

CAUTION
The apparatus is not disconnected from the AC power source so long as it is connected to the wall outlet, even if the apparatus itself is turned off. To fully ensure that the apparatus is indeed fully void of residual power, leave unit disconnected from the AC outlet for at least fifteen seconds.

CALIFORNIA PROP 65 WARNING
WARNING: This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)
For more information: www.vocopro.com/prop65

CAUTION:
READ THIS BEFORE OPERATING YOUR UNIT

1. To ensure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.

2. Install your unit in a cool, dry, clean place - away from windows, heat sources, and too much vibration, dust, moisture or cold. Avoid sources of hum (transformers, v motors). To prevent fire or electrical shock, do not expose to rain and water.

3. Do not operate the unit upside-down.

4. Never open the cabinet. If a foreign object drops into the set, contact your dealer.

5. Place the unit in a location with adequate air circulation. Do not interfere with its proper ventilation; this will cause the internal temperature to rise and may result in a failure.

6. Do not use force on switches, knobs or cords. When moving the unit, first turn the unit off. Then gently disconnect the power plug and the cords connecting to other equipment. Never pull the cord itself.

7. Do not attempt to clean the unit with chemical solvents: this might damage the finish. Use a clean, dry cloth.

8. Be sure to read the "Troubleshooting" section on common operating errors before concluding that your unit is faulty.

9. This unit consumes a fair amount of power even when the power switch is turned off. We recommend that you unplug the power cord from the wall outlet if the unit is not going to be used for a long time. This will save electricity and help prevent fire hazards. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.

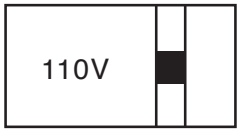
10. To prevent lightning damage, pull out the power cord and remove the antenna cable during an electrical storm.

11. The general digital signals may interfere with other equipment such as tuners or receivers. Move the system farther away from such equipment if interference is observed.

NOTE:
Please check the copyright laws in your country before recording from records, compact discs, radio, etc. Recording of copyrighted material may infringe copyright laws.

Voltage Selector (General Model Only)

Be sure to position the voltage selector to match the voltage of your local power lines before installing the unit.



Welcome

And thank you for purchasing the **UHF-5816** from VocoPro, your ultimate choice in Karaoke entertainment! With years of experience in the music entertainment business, VocoPro is a leading manufacturer of Karaoke equipment, and has been providing patrons of bars, churches, schools, clubs and individual consumers the opportunity to sound like a star with full-scale club models, in-home systems and mobile units. All our products offer solid performance and sound reliability, and to reinforce our commitment to customer satisfaction, we have customer service and technical support professionals ready to assist you with your needs. We have provided some contact information for you below.

VocoPro

1728 Curtiss Court
La Verne, CA 91750
Toll Free: 800-678-5348
TEL: 909-593-8893
FAX: 909-593-8890

VocoPro Company Email Directory

Customer Service & General Information
info@vocopro.com

Tech Support
techsupport@vocopro.com

Remember Our Website
Be sure to visit the VocoPro website **www.vocopro.com** for the latest information on new products, packages and promos. And while you're there don't forget to check out our Club VocoPro for Karaoke news and events, chat rooms, club directories and even a KJ Service directory!

We look forward to hearing you sound like a PRO, with VocoPro, the singer's ultimate choice.

FOR YOUR RECORDS

Please record the model number and serial number below, for easy reference, in case of loss or theft. These numbers are located on the rear panel of the unit. Space is also provided for other relevant information

Model Number _____

Serial Number _____

Date of Purchase _____

Place of Purchase _____

Listening for a Lifetime

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. VocoPro and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to a higher volume of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:
- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:
- Set the dial and leave it there.
- Pay attention to the different levels in various recordings.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Some common decibel ranges:

Level	Example
30	Quiet library, Soft whispers
40	Living room, Refrigerator, Bedroom away from traffic
50	Light traffic, Normal Conversation
60	Air Conditioner at 20 ft., Sewing machine
70	Vacuum cleaner, Hair dryer, Noisy Restaurant
80	Average city traffic, Garbage disposals, Alarm clock at 2 ft.

The following noises can be dangerous under constant exposure:

Level	Example
90	Subway, Motorcycle, Truck traffic, Lawn Mower
100	Garbage truck, Chainsaw, Pneumatics drill
120	Rock band concert in front of speakers
140	Gunshot blast, Jet plane
180	Rocket launching pad

-Information courtesy of the Deafness Research Foundation

Mounting

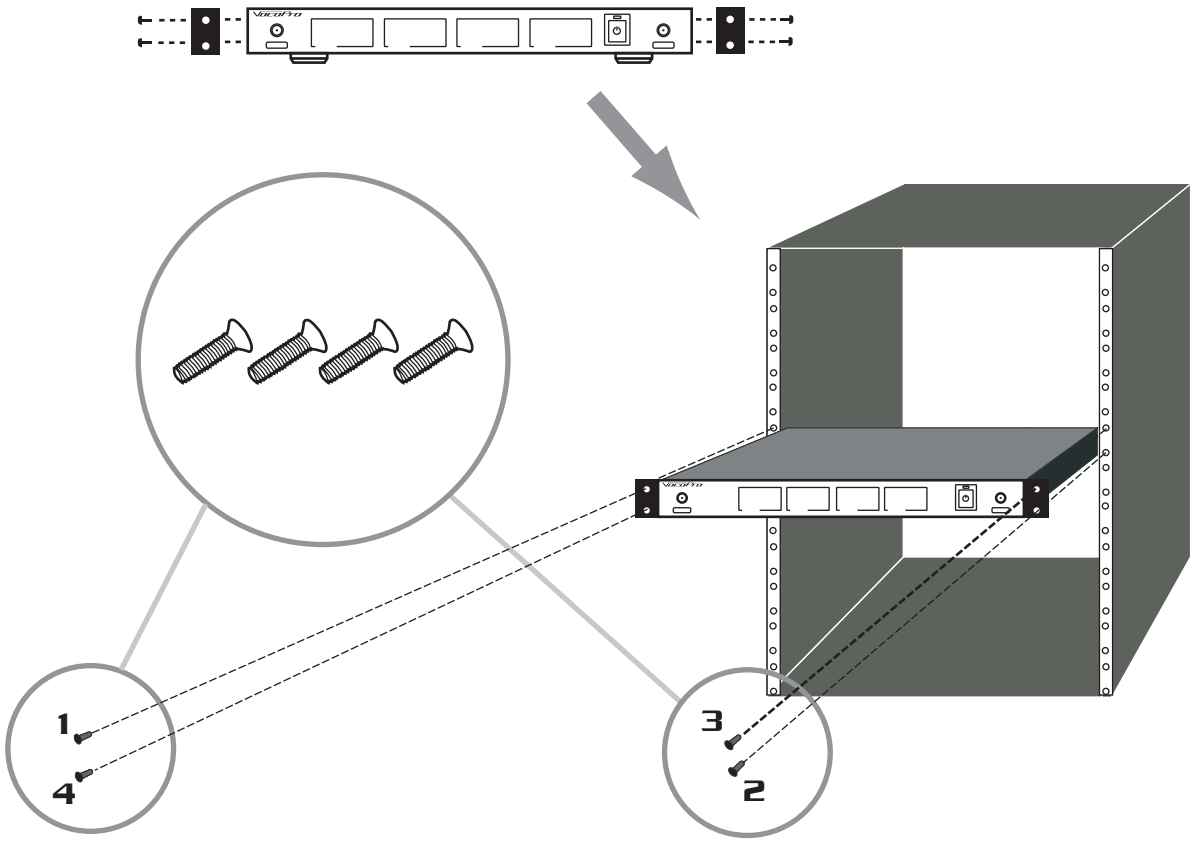
To install the UHF-5816 to a 19" rack case, complete the steps below.

1. Attach mounting brackets to the UHF-5816 with the supplied mounting screws.
2. Align the UHF-5816 with the desired space in rack and slowly slide in, rear panel first.

Note: Depending on your rack case design, it may be necessary to allow for sufficient space for the antennas.

3. While aligned, use rack case screws in the order shown below to stabilize the UHF-5816 in its space, using the "X" rotation (numbered below) will ensure even tension and flush alignment.

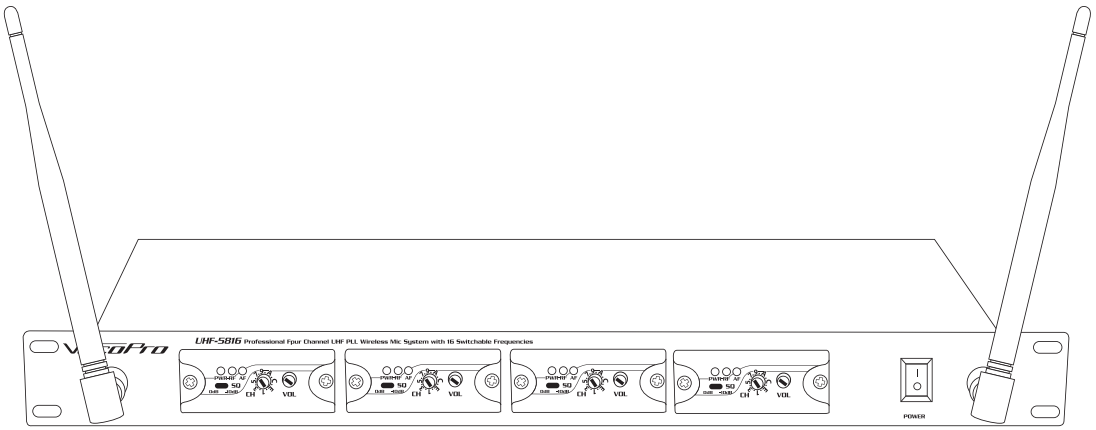
Note: Do not tighten screws firmly until all screws are in place.

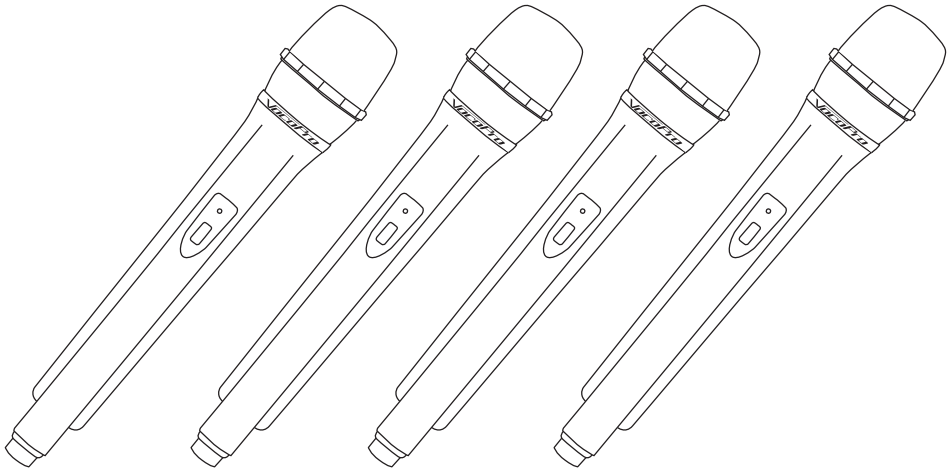


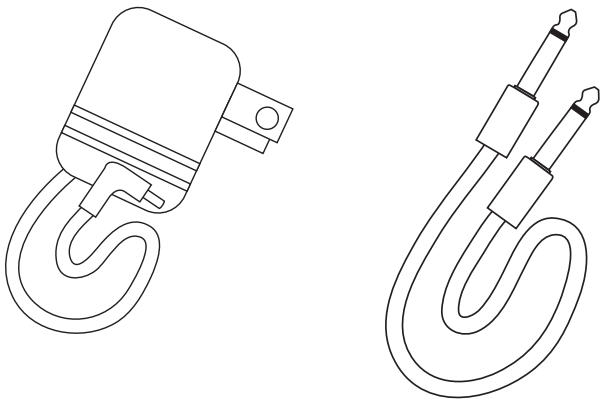
Getting Started

WHAT'S IN THE BOX

- UHF-5816 Receiver
- Wireless Microphones (4)
- Antennas (2)
- 1/4" Patch Cable
- Power Adapter





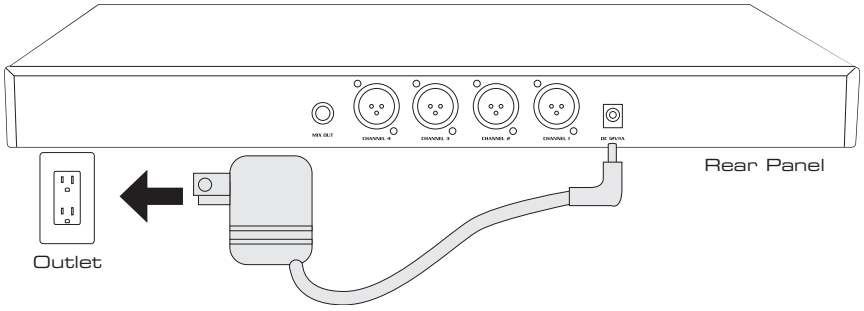


Getting Connected

The UHF-5816 can be connected to a mixer or amplifier in two ways. There are the dedicated XLR channel outputs that handle the audio signal independently, or there is the 1/4" mixed output that sends all the mic signals through a single cable. Use whichever method that suits your needs and equipment.

CONNECTING POWER

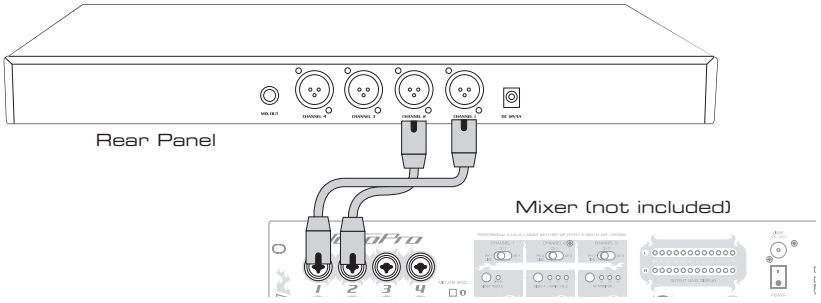
Connect the included power supply from the power outlet to Power Input located on the back of the UHF-5816 receiver.



USING THE XLR OUTPUTS

The XLR outputs allow you to connect each channel to the mixer independently. This gives you more control over the individual microphone channels when connected to a mixer.

You'll Need:
- UHF-5816
- 4 XLR Patch Cables (not included)
- An input device, such as a mixer or amplifier (not included)



TO CONNECT THE XLR OUTPUTS:
1. Ensure the main power switch on the front panel is turned off.
2. Connect one end of an XLR cable to the CH.1 output of the UHF-5816.
3. Connect the other end of the XLR cable to the desired input on your mixer.

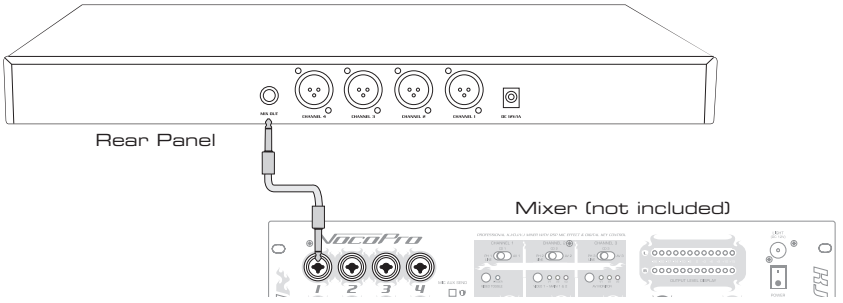
Note: To avoid confusion, it's recommended that the XLR jacks are attached correspondingly (e.g. CH.1 to CH.1, CH.2 to CH.2, etc. as shown).

4. Repeat steps 2 and 3 until all the XLR outputs are connected.

USING THE 1/4" MIXED OUTPUT

The 1/4" mixed output is useful if you do not have a mixer or if you have limited inputs available on your mixer. All four microphone signals are mixed together in this output.

You'll need:
- UHF-5816
- (1) ¼" patch cable (included)
- An input device, such as a mixer or amplifier (not included)



TO CONNECT THE 1/4" OUTPUT:
1. Ensure the main power switch on front panel is turned off.
2. Connect one end of a 1/4" cable to one of the ¼" mixed output on the rear panel of the UHF-5816.
3. Connect the other end of the 1/4" cable to the desired input on your mixer or amplifier.

Descriptions and Functions

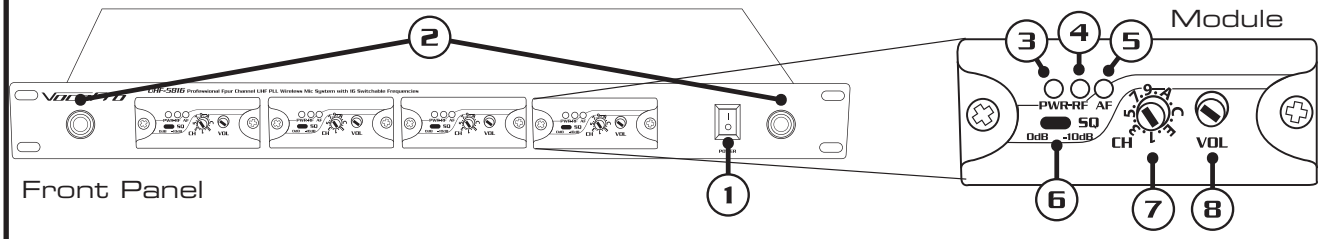
RECEIVER

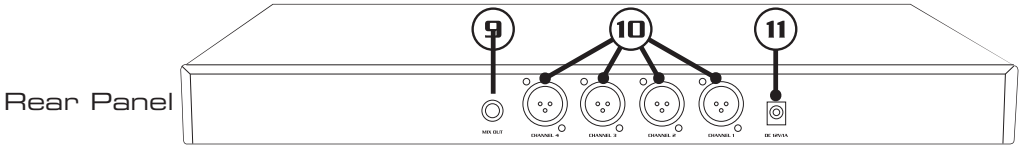
1. **Power –** This toggles power to the receiver ON/OFF.
2. **Antenna Posts –** These are where the antennas are connected.

Note: Each antenna can go on either post.

CHANNEL MODULES

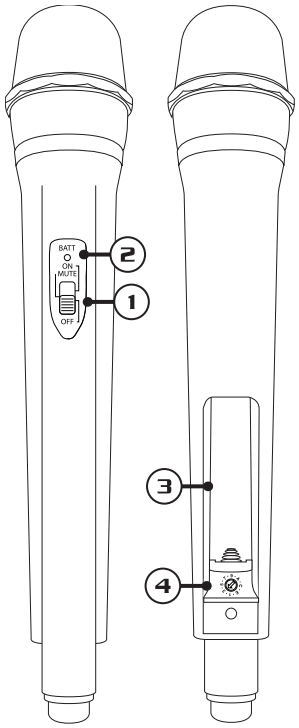
3. **Power LED –** These indicate power to each of the modules.
4. **RF LED –** These indicate microphone connection to each of the modules.
5. **AF LED –** These indicate audio reception from each of the microphones.
6. **SQ (Squelch) –** These toggle the threshold at which the module will receive audio. If the strength of the signal being received is too low, it will not be heard.
   - **0dB –** This means the threshold is low; meaning the range for the microphone is as far as it can be.
   - **-10dB –** This means the threshold is high; meaning the range for the microphone is as short as it can be.
7. **Channel Switch –** These allow the frequency of the microphones to be changed. There are 16 channels to choose from.
8. **Vol –** These adjust the output volume for each of the microphone channels.
9. **Mixed Output –** This jack outputs all 4 microphone signals through a single ¼" unbalanced output.
10. **Channel XLR Outputs –** These jacks output their respective channel audio through balanced XLR outputs.
11. **Power In –** This is where the included power adapter is connected.





MICROPHONE

1. **Power Switch –** This toggles power to the microphone OFF/ON.
   - MUTE – The middle position of the OFF/ON switch is the Mute function.
2. **Power LED –** This indicates the status of the microphone.
   - Green – Battery is full.
   - Red – Battery is low and needs replacing.
3. **Battery Compartment –** This is where the two AA batteries are installed.
4. **Channel Switch** – This allows the frequency of the microphones to be changed. There are 16 channels to choose from.



Setting Up the Microphones

Each of the microphones corresponds to one of the modules through the use of what's called a key tone. With this key tone, each microphone will only "speak" to its paired module; even if two microphones are set to the same channel. The channel switch changes the operational frequency of the microphone, whereas the key tone is fixed.

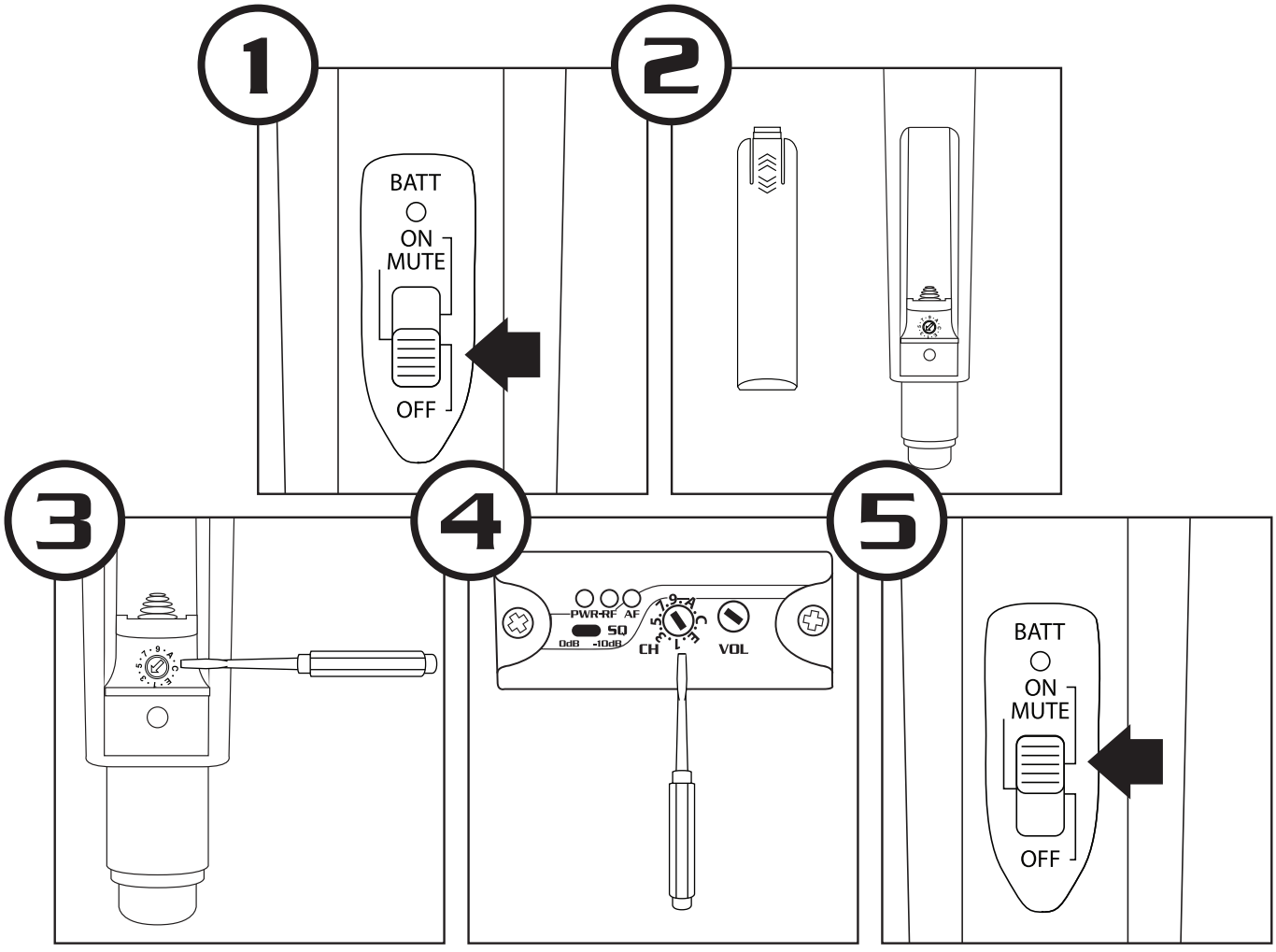
The UHF-5816 microphones are shipped pre-configured. The instructions below intended to be used when channel interference occurs.

CHANGING THE CHANNEL:

1. Power off microphone.
2. Remove battery cover on microphone.
3. Use the included tool, or something similar, to adjust the channel switch located in the battery compartment.

Note: It's recommended to switch channels 1 at a time.

4. Use the included tool, or something similar, to adjust the module channel switch to match the microphone.
5. Power on the microphone and test for audio.
6. Retry Steps 1-5 if problem still persists.



Commonly Asked Questions

What is Tone Key?
- The Tone Key is a particular signal used to tell the module to accept the audio being transmitted on the selected channel. This means that if two microphones are set to the same channel, the microphones will not cross-talk since they each have a different tone key. If no tone key is present with the transmitted audio, the module will not accept that audio.

Do I need to use the 4 XLR outputs to use this system?
- No, it's not necessary to use the XLR outs. They are optional connections used to transfer volume control to the mixer or amplifier they're connected to.
- The Mixed ¼" Output will send all 4 microphone signals through the one cable. Volume will be controlled by the Vol. knob on each respective channel module.

What is the range of the UHF-5816 microphones?
- When SQ is set to 0dB, the range is a maximum of 150ft.
- When SQ is set to -10dB, the range is a maximum of 75ft.

Why is there a heartbeat type thumping through the system?
- The power adapter is not supplying the correct voltage. Please contact VocoPro for a replacement at 800-678-5348.

What do I do about accessories missing from the box?
- Please contact VocoPro at 800-678-5348 regarding defective or missing accessories.

Notes

Notes

VocoPro®

PROFESSIONAL VOCAL SYSTEMS™

UHF-5816 Owner's Manual

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v1.0.1015

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