

# *IR-9009*

Infrared Wireless Microphone System

owner's manual

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## Safety



# **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.

- Read Instructions All the safety and operating instructions should be read before the appliance is operated.
- 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.
- Attachments Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- Water and Moisture Do not use this unit near water. For example, near a bathtub or in a wet basement and the like.
- 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.
- 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 if 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**

- 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, electric motors). To prevent fire or electrical shock, do not expose to rain and water.
- 3. Do not operate the unit upside-down.
- 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.

110V



### Welcome

And thank you for purchasing the IR-9009 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 vou 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 40	Quiet library, Soft whispers 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

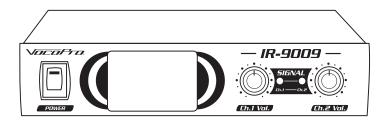
# Before Getting Started

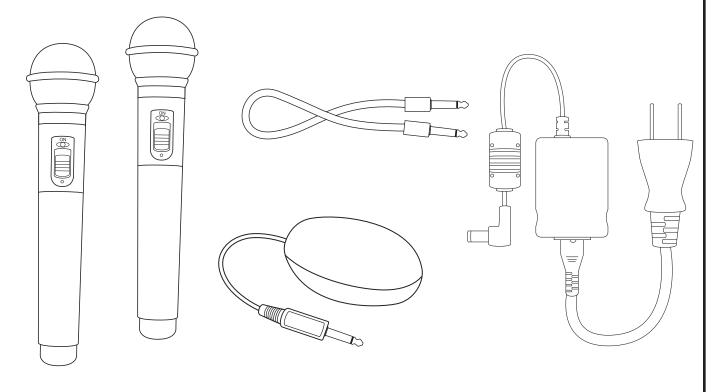
### **FEATURES**

- (2) Wireless Hand Held Microphones Included
- Dual Channel IR Receiver
- Two Discrete Channel Outputs (Ch.1/Ch.2)
- One Mixed Output Available
- Rugged, All Metal Mic Design
- High/Low Microphone Transmission Power Settings
- Interference Free Operation
- Optional Rechargeable Kit with Charging Cradle Available (Sold Separately)

Before starting any installation procedures, it is recommended to completely unpack all of the package contents. The original packaging should be kept in the even that re-shipping is needed. Upon unpacking the IR-9009, you should have received the following items:

- IR-9009 Receiver
- (2) Wireless Hand Held Microphones
- 3ft. Male/Male 1/4" Patch Cable
- External IR Sensor
- AC Power Adapter

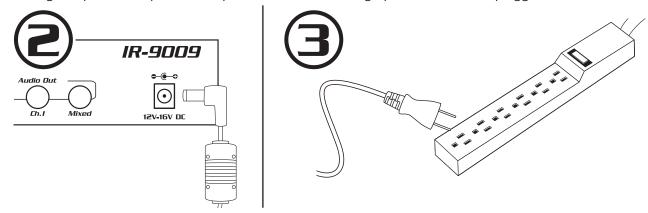




# **Connecting Power**

### **RECEIVER**

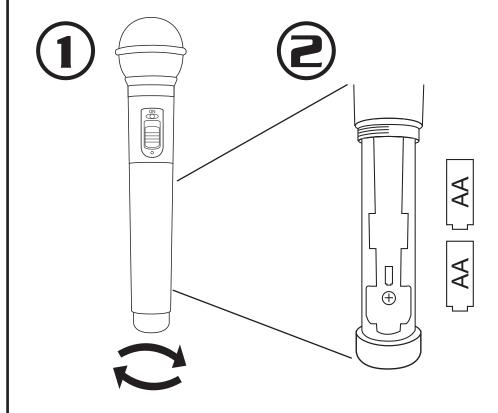
- 1. Ensure main power switch is set to the OFF position.
- 2. Connect the included power adapter to the power input on the rear of the receiver.
- 3. Plug the power adapter into a power outlet, or a surge protector that is plugged into an outlet.



Note: A surge protector is recommended to protect equipment from power spikes and outages.

### **MICROPHONES**

- 1. Unscrew metal battery cap.
- 2. Insert Two (2x) AA batteries; positive terminal facing downwards.



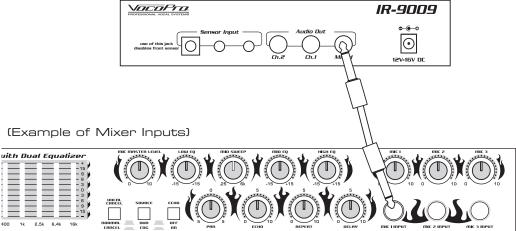
# Connecting Audio Output

There are 3 outputs available from which to get audio: the individual (Ch.1/Ch.2) channel outputs and the single mixed output. Depending on which jacks are used will determine the amount of volume control on the mixer/sound system.

### USING THE MIXED OUTPUT

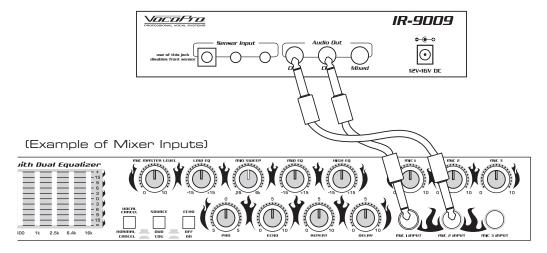
- 1. Ensure main power switch is set to the OFF position.
- 2. Connect one end of the included 1/4" 1/4" patch cable to the 1/4" output jack labeled MIXED on the back of the IR-9009 Receiver.

3. Connect the other end of the 1/4" - 1/4" patch cable in to the desired microphone input on the mixer/ sound system.



### USING THE INDIVIDUAL CHANNEL OUTPUT

- 1. Ensure main power switch is set to the OFF position.
- 2. Connect one end of the included 1/4" 1/4" patch cable to the 1/4" output jack labeled CH.1 on the back of the IR-9009 Receiver.
- 3. Connect the other end of the 1/4" 1/4" patch cable into the desired microphone input on the mixer/sound system.
- 4. Repeat steps 2 & 3 for the CH. 2 1/4" jack.

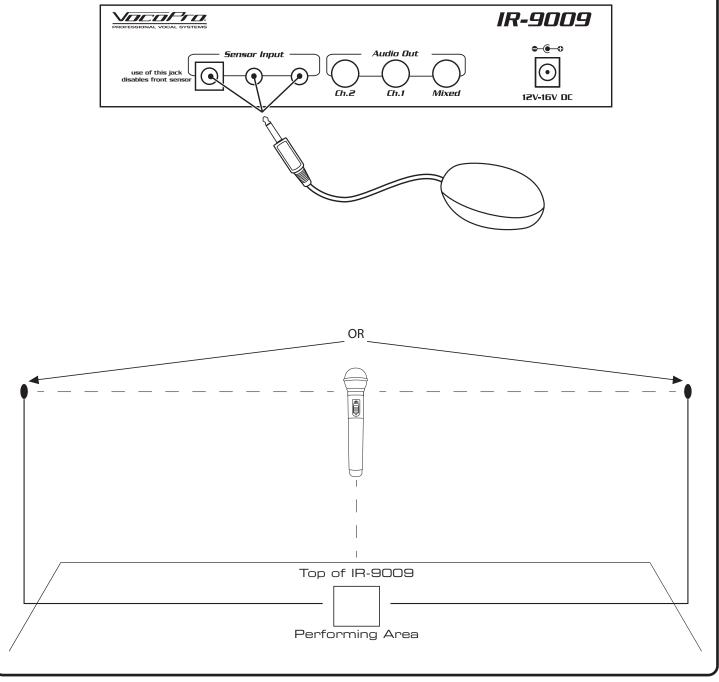


# Connecting External Sensors

The IR-9009 requires line-of-sight to the microphones for continuous audio. The IR sensor is located on the front of the main receiver and should face the performing area. To enhance reception, the system includes an external sensor to place at a 90 degree angle relative to the performing area.

### USING THE EXTERNAL SENSOR

- 1. Ensure main power switch is set to the OFF position.
- 2. Connect the included external sensor into the 1/8" Sensor Input on the back of the IR-9009 receiver. **Note: Plugging the external sensor into the 1/8" input, in the white square, will disable the front receiver sensor on the IR-9009.**
- 3. Place the external sensor in a location with a clear view of the performing area. E.g.: at a 90 degree angle from the performing area, or on the ceiling above the stage.



# Descriptions and Details

### **RECEIVER**

- **1. Power** This switch turns the power OFF/ON to the system.
- 2. IR Sensor This detects and receives the signals from the hand held microphones. Note: The microphones need to have line-of-sight to at least one receiver for continuous audio.
- 3. Ch.1 Volume This alters the volume for Microphone 1.
- 4. CH.1 Signal LED This LED registers the signal from Microphone 1.

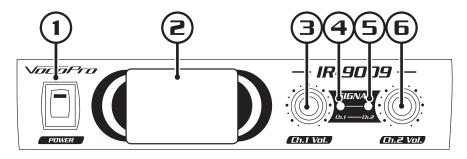
Note: The LED will shine when connected to its respective mic.

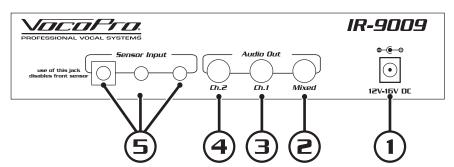
- **5. CH.2 Volume** This alters the volume for Microphone 2.
- **6. CH.2 Signal LED** This LED registers the signal from Microphone 2. **Note:** The **LED** will shine when connected to its respective mic.

#### RECEIVER - BACK PANEL

- 1. AC In This is where the power adapter is plugged in.
- 2. Mixed Output This 1/4" jack outputs the audio signals from both Microphone Channel 1 & 2.
- 3. Ch.1 Output This 1/4" jack outputs the audio signal from Microphone 1 only.
- 4. Ch. 2 Output This 1/4" jack outputs the audio signal from Microphone 2 only.
- 5. Sensor Inputs These 1/8" jacks are where the External IR Sensors are plugged in.

  Note: The 1/8" Sensor Input that is highlighted with the white square will disable the main front IR Sensor, if used.

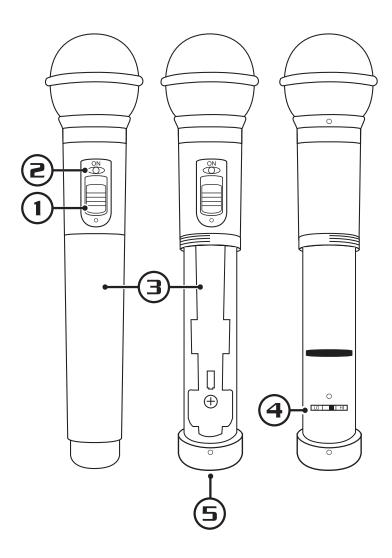




# Descriptions and Details

### **MICROPHONE**

- 1. Power This toggles the microphone power OFF/ON.
- 2. Power LED/Low Battery Indicator This LED displays power status and battery level.
  - Green The battery charge is good.
  - Red The battery charge is low; change or recharge the batteries.
- 3. Battery Compartment Insert two (2x) AA batteries.
  - Rechargeable batteries are compatible.
- 4. High/Low Switch This switches the output transmission power from High and Low levels.
  - Battery life will be shorter when set to High output.
- 5. Charging Contact This is only used in conjunction with the optional charging cradle. (Sold Separately)



# Commonly Asked Questions

### Q: What is "line-of-sight" and why do the microphones require it?

A: Line-of-sight is a term meaning the microphone must have an unobstructed view to the receiver. The microphones communicate via infrared signals which does not penetrate and pass through materials like VHF or UHF frequencies do.

#### Q: What do the external sensors do?

**A:** They enhance the reception area that the microphones can be picked up. Since the microphones need to face at least one receiver at all times, they allow for greater freedom of movement while performing.

### Q: What is the charging contact for?

A: It is used with the charging cradle accessory that is available. Rechargeable batteries can be charged while still installed in the microphones. The charging cradle should not be used with AA alkaline batteries.

#### Q: What do I do is I'm missing pieces from the box?

A: Please contact VocoPro at 800-678-5348 regarding any broken or missing accessories.

Notes	
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