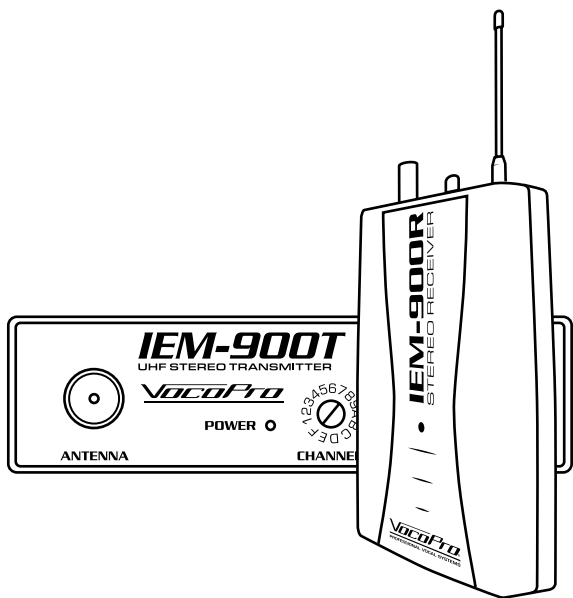


VocoPro®



IEM-900R ***IEM-900T***

UHF Stereo Receiver
and Transmitter

OWNER'S MANUAL

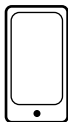
WELCOME

And thank you for purchasing the IEM-900T/R from VocoPro. Along with quality products our commitment to customer satisfaction means we have technical support professionals ready to assist you. Please visit our website: www.vocopro.com for the latest information.



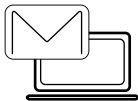
We are at:

VocoPro
1728 Curtiss Court
La Verne, CA 91750



Phone:

Toll Free: 800-678-5348
TEL: 909-593-8893
FAX: 909-593-8890



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info@vocopro.com

Tech Support:

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VocoPro hereby disclaims any and all liabilities for property, equipment, building, and electrical damages, injuries to any persons, and direct or indirect economic loss associated with the use or reliance of any information contained within this document, and/or as a result of the improper, unsafe, insufficient and negligent assembly, installation, rigging, and operation of this product.

Purchase Info

Please record the model number and serial number below, for easy reference, in case of loss or theft. These numbers are located on the packaging the item came in.

Model Number

Serial Number

Date of Purchase

Place of Purchase

This is not considered a receipt. Please keep a copy of your purchase receipt, provided by the dealer, in your records. A receipt is required for all warranty work.

CALIFORNIA PROP 65 WARNING

⚠ WARNING: Cables, Cable Assemblies, and Printed Circuit Boards can expose you to chemicals including lead and lead compounds which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to **www.P65Warnings.ca.gov**



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 unit to rain or moisture.



This device complies with Part 15 of the FCC rules. Operation is subject to the condition that this device may not cause harmful interference.

FCC license may be required

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. Non-use 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.

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:
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, electric 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 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.

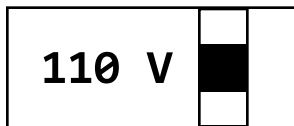
10. To prevent lightning damage, pull out the power cord and remove the antenna cable during an electrical storm.

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.

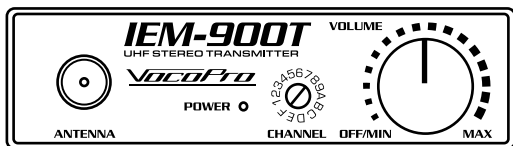
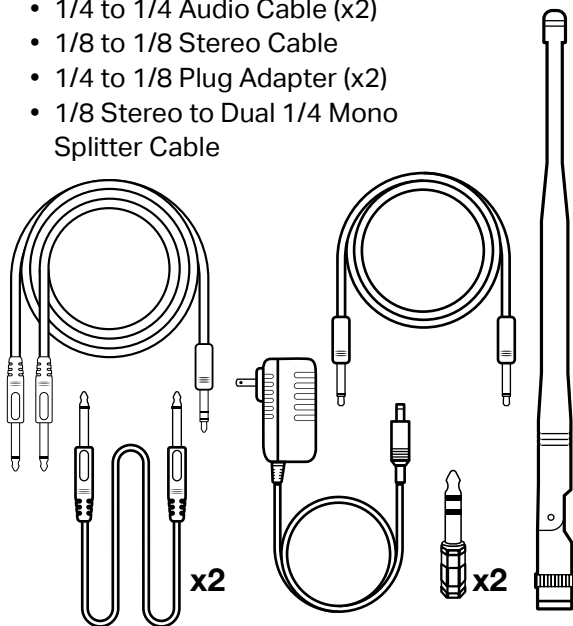
Voltage Selector (General Model Only)

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



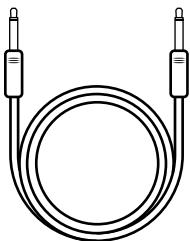
Inside the IEM-900T (Transmitter) Box

- IEM-900 Transmitter
- Antenna
- Power Adapter
- 1/4 to 1/4 Audio Cable (x2)
- 1/8 to 1/8 Stereo Cable
- 1/4 to 1/8 Plug Adapter (x2)
- 1/8 Stereo to Dual 1/4 Mono Splitter Cable

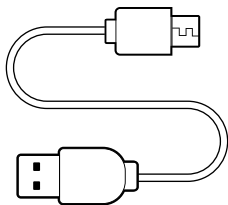


Inside the IEM-900R (Receiver) Box

- IEM-900 Bodypack Receiver
- USB Charging Cable
- 1/8 to 1/8 Stereo Cable



USB is for power only,
no computer access.



IMPORTANT- Use charging cable only if rechargeable batteries have been installed. Charging regular alkaline batteries may cause explosion.

Specs and Features

Transmitter and Receiver:

Frequency Band: UHF 902-928MHz.

Preset channel: 16 channel preset.

Oscillation Mode: PLL

Frequency Stability: $\pm 0.005\%$

Modulation Mode: FM Stereo Modulation.

Max. Deviation Range: 75 KHz.

S/N Ratio: $>95\text{dB}$,

Dynamic Range: $>100\text{dB}$

Frequency Response: 50 - 15,000 Hz.

T.H.D.: $<1\%$

Transmitter Only:

RF Power: $<10\text{mW}$.

Audio Input: 1/4" balanced input X 2 (left and right)

Audio Input level: $<4\text{V}$

Audio Output: 1/8" stereo output X1.

Audio Output level: $<0.5\text{V}$

Power supply: DC 12V 350mA

Power: 110/220V (DC12-18V Power Adapter)

System Transmitter Dimensions:

(L x W x H): 8.3" x 6.7" x 1.7"

Specs and Features Cont.

Receiver Only:

Sensitivity: <-95dBm

Audio Output: 1/8" stereo output X1.

Audio output level: <1V

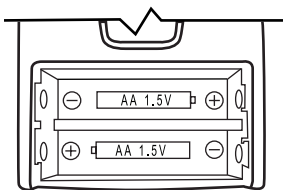
Power supply: 2xAA battery

Beltpack Receiver Dimensions:

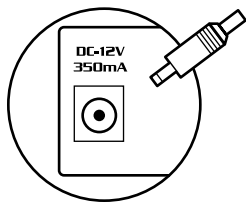
(L x W x H): 4.3" x 2.5" x 0.8"

Power On the Device

Place 2, AA batteries (rechargeable or regular) into the back of the IEM-900R and replace cover. For the IEM-900T, plug in the DC-12V 350mA power adapter.



Back of IEM-900R



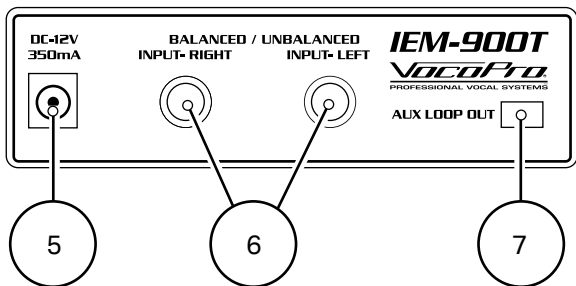
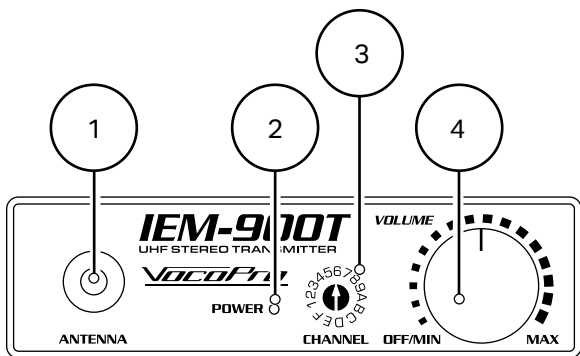
Back of IEM-900T

IEM-900T Functions

Functions:

1. Antenna Socket- Attach antenna here.
2. Power LED indicator- Lights up when the transmitter is on.
3. Channel Selector- Turn knob to select the channel to transmit on. There is an arrow engraved into the knob to show which channel number is being selected. See Setting a Wireless Channel (pg. 20) for more information.
4. Volume- Rotate clockwise to turn the transmitter on and increase transmission volume.
5. DC input- Plug the power adapter in here to supply power.
6. INPUT RIGHT & LEFT- 1/4" inputs to connect from your mixer or amplifier.
7. AUX LOOP OUT- Direct output for monitoring. This connection will output audio even if the transmitter is off.

IEM-900T Diagram

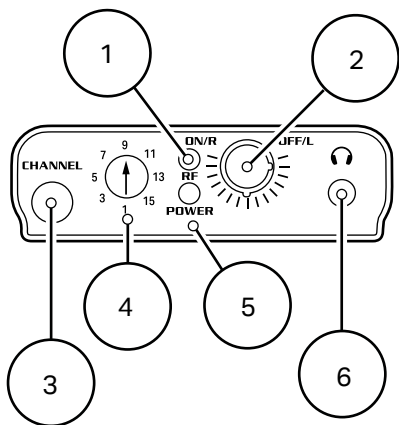


IEM-900R Functions

1. RF– This LED indicates connection status.
 - If the LED is red, there is a connection between the receiver and transmitter.
 - If the LED is off, there is no connection.
2. Dual Function Control Dial
(see also page 20)
 - 2a- The top knob controls the power and volume. Turn clockwise to turn the receiver on and increase listening volume.
 - 2b- The bottom knob controls the balance. Put in the center to have even balance of the left and right input signals from the transmitter. Turn clockwise to turn down the left input signal, turn counter-clockwise to turn down the right input signal.
3. Ant- This permanent antenna receives signals from the transmitter.
4. Channel Selector– Turn knob to select the channel the receiver will pick up. There is an arrow engraved into the knob to show which channel number is being selected. See Setting a Wireless Channel (pg. 20) for more information.

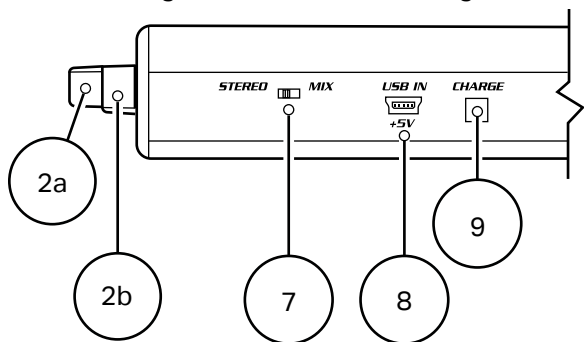
IEM-900R Diagram

5. POWER LED- Shows if Receiver has power.
 - If LED is green, the battery level is good.
 - If LED is red, the battery level is low, change or recharge the batteries.
6. Headphone Out- 1/8 inch stereo output for listening to transmitted signal.



IEM-900R Functions

- MIX / STEREO- When set to STEREO, it will preserve separation between left and right signals so the left input will go to the left headphone and right input to right headphone. When set to MIX, the left and right signals will be mixed together so you will hear both inputs in both sides of the headphones.
- +5V USB IN- Micro-USB connection used to recharge the batteries. Only use if rechargeable batteries are installed. Cannot be used to interface with computer.
- Charge Indicator- LED indicates the charge level when recharging the batteries.
 - If LED is red, batteries are charging.
 - If LED is green, batteries are charged



Setting a Wireless Channel

Once the physical connections to the transmitters and receiver are made, the next step is establishing a wireless connection.

Selecting a Clear Channel on the IEM-900R receiver

Power ONLY the IEM-900R on; leave the IEM-900T transmitter powered off. Change the Channel by twisting the Channel Select knob (*Item #4, pg 19*). Observe the RF indicator light as the channel changes:

- If the LED stays on, the channel is not clear.
- If the LED blinks, the channel is not clear.
- If the LED stays off, the channel is clear and is good to use.

After a clear channel has been discovered, tune the IEM-900T transmitter to the same channel.

Frequently Asked Questions

Q: There are 16 channels, does that mean I can have 16 sources all on their own channel?

A: If there was no frequency interference on any of the 16 channels then yes you can.

Q: The sound coming through the receiver is very low, what can I do?

A: Make sure the signal you are sending to the transmitter is strong and loud. You should be able to hear it through the AUX Loop Out on the transmitter. Then start with the volume on the transmitter up about half way, and turn on the receivers. Adjust from there.

Q: What kind of rechargeable batteries can be installed in IEM-900R Receiver?

A: Any type of rechargeable battery will work so long as they are AA. (i.e.: Lithium-Ion, Nickel Metal-Hydride, Nickel-Cadmium, etc.)

Q: What do I do if I'm missing components from my box?

A: Please call VocoPro regarding any missing or defective accessories at 1-800-678-5348.

Notes:

Our Team is Here to Help



Please do not return to the retailer if you are having a technical issue operating or connecting the unit. Additional information and support can be found at- **vocopro.com/support**

Toll Free: 800-678-5348

TEL: 909-593-8893

FAX: 909-593-8890

Email Tech Support at:
techsupport@vocopro.com

IEM-900R/T

Owner's Manual

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