

## Troubleshooting Guide

### Having trouble with the sound system?

#### *Condition*

#### *Possible Solution*

No sound (power LED not lit):

- turn POWER switch on
- plug in power cord

No sound (power LED lights):

- check for output from source
- make sure all cables are completely plugged in
- increase volume control

Distorted sound:

- check input cable connection
- lower input signal level

Excessive hum or noise:

- use shielded input cable

### Having trouble with the wireless system?

#### *Condition*

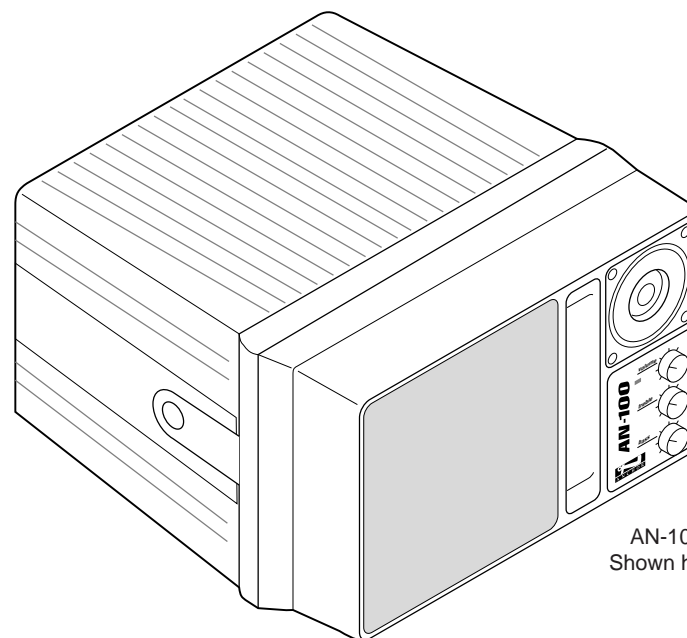
#### *Possible Solution*

No sound:

- confirm transmitter power switch is set to on
- turn up volume control
- plug microphone into body-pack transmitter
- turn sound system on
- replace mic/transmitter battery
- make sure collar or headband mic cable is fully plugged into transmitter

Frequent transmitter dropouts:

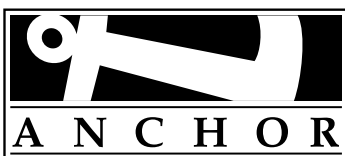
- replace mic/transmitter battery
- move mic/transmitter closer to AN-100



AN-100  
Shown here

## Owner's Manual for Models

**AN-100**  
**AN-100W**  
**AN-100DC**  
**AN-100IR**



ANCHOR Audio, Inc. (310) 784-2300  
100-0094-000 / Revision B, 09/00





## Important Safeguards



**CAUTION:** To reduce the risk of electric shock, do not remove the cover. No user-serviceable parts inside. Refer servicing to qualified personnel.

**WARNING:** To prevent fire or electric shock, do not expose this equipment to rain or moisture.

**CAUTION:** To reduce the risk of fire, replace only with same type fuse (see specifications).



**ATTENTION:** Pour éviter les risques de choc électrique, ne pas enlever le couvercle. Aucun entretien de pièces intérieures par l'utilisateur. Confier l'entretien au personnel qualifié.

**AVIS:** Pour éviter les risques d'incendie ou d'électrocution, n'exposez pas cet article à la pluie ou à l'humidité.

**ATTENTION:** Pour diminuer le risque d'incendie, remplacer par des fusibles de même type (voir caractéristiques).

### EXPLANATION OF GRAPHICAL SYMBOLS

The 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 humans.

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.

### EXPLICATION DES SYMBOLES GRAPHIQUES

Le symbole éclair avec point de flèche à l'intérieur d'un triangle équilatéral est utilisé pour alerter l'utilisateur de la présence à l'intérieur du coffret de "voltage dangereux" non isolé d'ampleur suffisante pour constituer un risque d'électrocution.

Le point d'exclamation à l'intérieur d'un triangle équilatéral est employé pour alerter les utilisateurs de la présence d'instructions importantes pour la fonctionnement et l'entretien (service) dans le livret d'instruction accompagnant l'appareil.

### DATE OF MANUFACTURE

The date of manufacture of this Anchor Audio product can be determined by the eight digit serial number code. The fourth digit denotes the year, the third digit (letter) denotes the month (A=Jan, B=Feb, etc.) Example: "AWD01432" states that the unit was manufactured in April of 2000.



## Specifications

Rated power output:	25 watts continuous 45 watts dynamic
Sensitivity for rated output:	
Line:	-20 dBV (100 mVrms)
Microphone:	-43 dBV (7.5 mVrms)
Instrument:	-30 dBV (30 mVrms)
Frequency response:	65 Hz – 18 kHz ± 3dB
Max SPL @ rated power:	101 dB @ 1 meter
Speaker type:	4.5 inch woofer, 10mm dome tweeter
Inputs	
Line inputs (2):	Hi-Z, unbalanced, RCA (summing L+R)
Microphone input:	Lo-Z, unbalanced, 1/4"-phone
Instrument input:	(3k), unbalanced, 1/4"-phone
DC output:	12 Volts DC, 100 mA max
RF Wireless Receiver:	FM Superheterodyne
Sensitivity:	2µV at S/N 40 dB
Frequencies:	pair #1: 169.445 and 170.245 MHz pair #2: 171.105 and 171.845 MHz
IR Wireless Receiver:	FM Superheterodyne
Sensitivity:	>25dBuV
Frequency:	2.06MHz
AC Power requirements	110 - 125 VAC, 50/60 Hz
export model:	208 - 240 VAC, 50/60 Hz (50 watts max)
Fuse rating:	T 1.0A / 250V
export model:	T 0.5A / 250V (internally mounted)
Dimensions (HWD):	5.25 x 8.4 x 9", 13 x 21 x 23 cm
Weight:	8.5 lbs, 3.8 Kg

Specifications subject to change without notice.

Thank you for choosing an Anchor Audio portable sound system. Our products incorporate state-of-the-art design and the finest quality of materials and workmanship. We're proud of our products and appreciate the confidence which you have shown by selecting an Anchor system.

I hope you'll take a few of minutes to review this manual. We've incorporated several unique features into our products, and your knowledge of how to use them will enhance the performance and your enjoyment of the system.

David Jacobs, President on behalf of all Anchor employees

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## Quick Use Guide

The AN-100 monitor is used to amplify the signal from a microphone, electronic musical instrument or line-level sources (cassette, CD, VCR, etc). You'll need a connection cable and an AC outlet.

### Here's how easy it is to use:

1. Place the AN-100 at desired location.
2. Set volume control on front of speaker to minimum before turning on the power.
3. Plug the power cord into a grounded 115 volt outlet (220 volt outlet for export model).
4. Plug a microphone into the MIC input jack, or an audio source into the INST or LINE 1 / LINE 2 jacks.
5. Turn the power switch on the rear panel "ON" (the red LED on front panel should light).
6. Adjust the volume, bass and treble controls. for desired sound.

*To operate the wireless mic system on model AN-100W, see "Wireless Operation" on pages 8 and 9, or pages 10 and 11 for AN-100IR. For general operating instructions, see the "Operation" section beginning on page 6.*

Problems?  
Consult the  
troubleshooting  
section on the  
back page of  
this manual.



## Getting Started

### Inspection and inventory of your system

Check unit carefully for damage which may have occurred during transit. Each Anchor product is carefully inspected at the factory and packed in a special carton for safe transport.

#### Inventory

- AN-100 powered monitor
- Warranty and registration card

*All damage claims must be made with the freight carrier.*

Notify the freight carrier immediately if you observe any damage to the shipping carton or product. Repack the unit in the carton and await inspection by the carrier's claim agent. Notify your dealer of the pending freight claim.

### Returning your unit for service or repairs

Should your unit require service, contact your dealer or our Customer Service Department at (310) 784-2300 to obtain a Return Authorization (RA) number. All shipments to Anchor must include an RA number and must be shipped prepaid. *C.O.D. shipments will be refused and returned at your cost.*

### Warranty registration

Please fill out the warranty card and return it with a copy of your invoice to Anchor's Customer Service Department. This will activate your limited six year warranty.

Save the shipping carton and packing materials. They were specially designed to ship your unit safely.



## Accessories

### WH-1000

Handheld RF wireless transmitter microphone for AN-100W. Two channel selectable. Available in two frequency pairs.

### WL-1000

Body-pack RF wireless transmitter AN-100W. Two channel selectable. Available in two frequency pairs. Use with HBM-35, LM-30 or CM-1000 microphone (order mic separately).

### IRH-10

Handheld IR wireless transmitter for AN-100IR.

### IRB-10

Body-pack IR wireless transmitter for AN-100IR. Includes emitter/microphone. We recommend using HBM-35, LM-30 or CM-1000 microphone for improved performance (order mic separately).

### IRD-10

External IR sensor for AN-100IR for increasing wireless range or minimize transmission "dead" zones.

### HBM-35

Headband microphone for use with body-pack transmitters. Best choice microphone for use in large or feedback prone rooms.

### LM-30

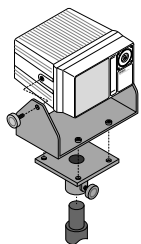
Lapel microphone for use with body-pack transmitters.

### CM-1000

Collar microphone for use with body-pack transmitters.



## Accessories

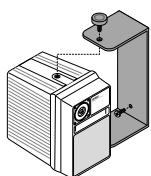


### SB-1 Swivel Stand Mounting Bracket

The SB-1 bracket can be used to mount the AN-100 to a wall, ceiling or on a speaker stand (stand adapter included).

### MSB-201 Combination Mic/Speaker Stand

Floor stand with 33" adjustable boom. Doubles as speaker stand when combined with SB-1 mounting bracket



### SB-3 Swivel Wall Mounting Bracket

Used for mounting the AN-100 to the wall or ceiling.

### SB-360 Swivel (360°) Wall Mounting Bracket

Used for mounting the AN-100 to the wall or ceiling.

### RM-1 Single Rackmount Kit

### RM-12 Dual Rackmount Kit

Rackmount kits allow mounting of AN-100 monitors in a standard equipment rack, three spaces high (5-1/4"). The rackmount kits are adjustable (front/back), and include mounting hardware. Color: satin black.

### MIC-90P Handheld Microphone

Anchor's dynamic, balanced, low impedance microphone with a unidirectional pick-up pattern. Comes with a 20' cable with 1/4"-phone plug and mic clip.

### SS-250 Speaker Stand

Adjustable stand made of black, anodized aluminum.

### CC-100 Carry Bag

Cordura nylon bag with storage compartment for AN-100.

### AK-100 Accessory Kit for AN-100

Includes MIC-90P microphone, CC-100 bag, MSB-201 mic/speaker stand and an SB-1 mounting bracket.



## Feedback Information

### What causes feedback?

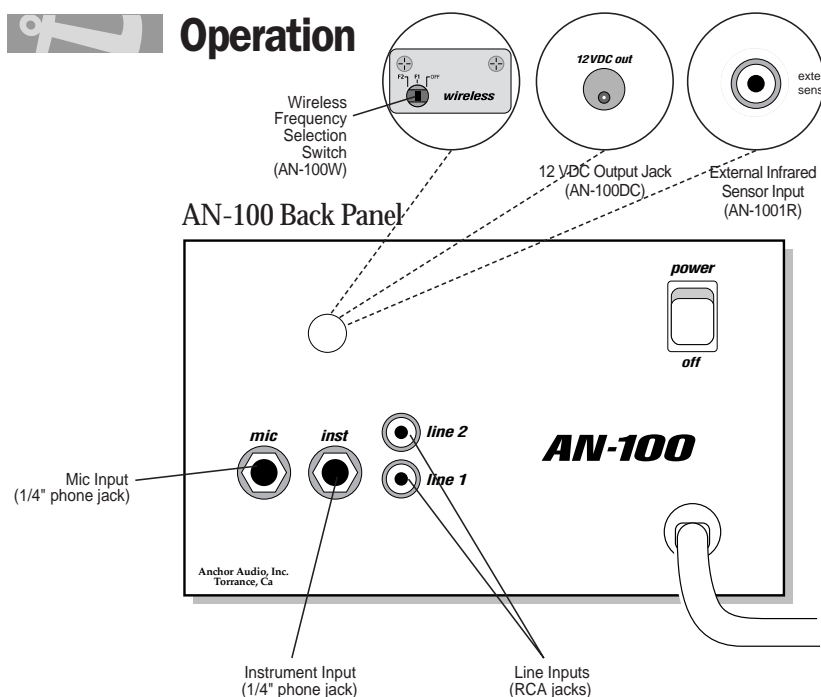
Feedback is a ringing, howling, or shrill sound that is self-generated by the sound system. It is the result of sound from the speakers being picked up by the microphone(s) in use and then re-amplified by the system. This can form a self-sustaining loop that can damage the sound system if allowed to continue.

### How to prevent feedback

ALWAYS STAND BEHIND THE SPEAKER  
WHEN USING A MICROPHONE.

**CAUTION:** *Feedback can damage your equipment and may be hazardous to your hearing. To avoid feedback, always make sure volume controls are at minimum before turning unit on. If feedback occurs, immediately reduce the volume.*

## Operation



### Operating the sound system

1. Place the AN-100 at desired location.
2. Set volume control on front of speaker to minimum before turning on the power.
3. Plug the power cord into a grounded 115 volt outlet (220 volt outlet for export model).
4. Plug a microphone into the MIC input jack, or an audio source into the INST or LINE 1 / LINE 2 jacks.
5. Turn the power switch "ON" (the red LED on front panel should light).
6. Adjust the volume, bass and treble controls for desired sound.

ALWAYS use shielded audio cables on input connections to prevent interference

## Wireless Operation - IR

will be about 50% longer when used in the "lo" power mode.) Confirm the channel select switch is in the "left" position. Lastly, the internal gain potentiometer has been set at the factory. However, it may be necessary to "fine tune" the gain level to accommodate the output sensitivity of the mic being used.

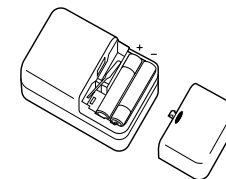
### External sensor

An external sensor can be used to increase the operating range of the infrared system (up to 33 feet), receive the emitter signal around an obstruction or to eliminate "dead" zones in an irregularly shaped room. The AN-100IR is equipped with a jack on the rear panel for connecting the sensor.

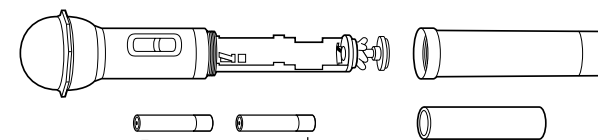
### Replacing the batteries

**Note:** The transmitter power switch must be in the OFF position.

**BODY-PACK:** Open battery cover on the top of the transmitter box and insert fresh "AA" alkaline batteries, observing proper polarity. Close battery cover.



**HANDHELD:** Unscrew the battery compartment cover at the lower end of the microphone and remove plastic battery holder tube. Insert fresh "AA" alkaline batteries, both facing the same direction, into the tube. Insert battery holder tube into microphone, positive end of batteries towards the bottom of the microphone. Reassemble microphone.

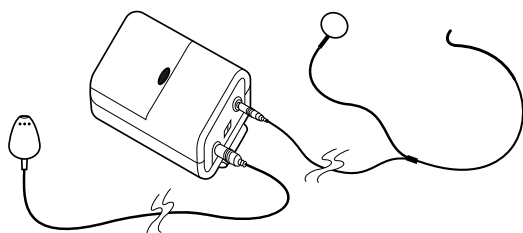


**IMPORTANT:** If rechargeable batteries are preferred, be sure that they are completely charged prior to use. As the typical operating voltage for rechargeable batteries is lower than alkaline batteries, shorter operating times will be noticed as compared alkaline batteries.

## Wireless Operation - IR

### Setting up the wireless - (AN-100IR Model Only)

The AN-100IR has a built-in infrared wireless receiver that operates like a remote control for a television set or home stereo. Ideal operation can be achieved by maintaining a constant "Line of Sight" between the emitter and the receiver at all times. This is best attained by mounting the AN-100IR above the highest obstruction in the room (audience, file cabinets, etc.) Reflected IR signals off of hard surfaces such as walls or windows may help increase the performance range or minimize "dead" zones in obstruction filled rooms.



**IMPORTANT:** The AN-100IR system is designed specifically for indoor use. Though normal performance can be expected from all wired features of the AN-100IR when used outdoors, the wireless emitter and sensor will not work properly.

**HAND HELD:** Be sure the microphone/emitter has fresh "AA" alkaline batteries. Turn the microphone on using the switch on the front of the microphone and it's ready for use.

**BODY-PACK:** Be sure the transmitter has fresh "AA" alkaline batteries and that the microphone/emitter is properly connected. Though the emitter has a built-in microphone, we recommend the use of an external headband or collar type microphone. This will allow the mic element to be placed closer to the speaker's mouth, minimizing the risk of feedback. (Connecting an external microphone will automatically disconnect the mic inside the emitter unit.) Turn the transmitter on.

**INSIDE THE BATTERY COMPARTMENT:** Select proper power mode according to room size; "hi" power mode for large rooms and "lo" power for smaller rooms. (Battery life

## Operation



**line 2**



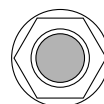
**line 1**

### Line Inputs (summing)

The line-level RCA input jacks may be used with audio sources like computers, VCR's, and cassette tape or compact disc players.

The inputs may be used for two separate sources, or they may be used to sum L+R stereo outputs to a mono signal without the need for adapters.

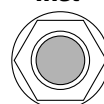
**mic**



### Mic Input

An unbalanced, low impedance microphone input. For use with the MIC-90P or other mics that have a 1/4" phone plug.

**inst**



### Instrument Input

The instrument input (1/4"-phone jack) is for guitars, keyboards or any instrument with an electronic transducer. It may also be used for wireless microphone receivers. The instrument input has a higher sensitivity than the line input.

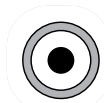
**Note:** All connections must be made with shielded cable to avoid hum, buzzing, or radio interference.

**12VDC out**



### DC Output (AN-100DC model only)

12 Volts DC output jack for use with wireless or other external accessories; maximum capacity of 100 ma.



### External Infrared Sensor Input (AN-100IR model only)

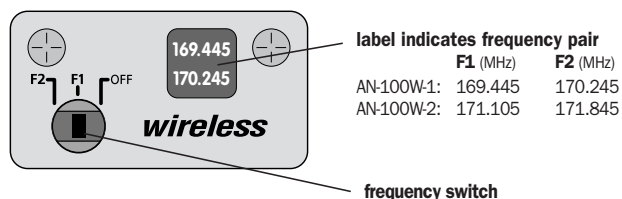
Connect an external sensor to this input to increase the operating range of the infrared system (up to 33 feet), receive the emitter signal around an obstruction or to eliminate "dead" zones in an irregularly shaped room.

## Wireless Operation - RF

### Setting up the wireless system (AN-100W Models Only)

Set the frequency of the receiver.

The AN-100 has a built-in wireless receiver that is available with two different frequency pairs (this allows for operation of up to 4 units simultaneously). A label on the rear panel indicates which 2 frequencies your system is equipped with. The desired frequency is selected via the frequency switch.



1. Set the frequency of the receiver to either of the two channels, F1 or F2.

*If you experience ongoing interference problems with your wireless system, the selected frequency may be incompatible with other RF systems in your area. Try the other channel.*

Set the frequency of the transmitter.

During use, make sure the transmitter you are using is set to the same frequency as the receiver as set above.

**HANDHELD:** Set the frequency switch inside the battery compartment to match the channel of the receiver. Replace the cover—but *don't overtighten!*

Frequency Switch

**BODY-PACK:** The power/frequency switch on the transmitter determines the frequency. During use, set the switch to match the frequency of the receiver.

## Wireless Operation - RF

### Replacing the transmitter battery

*Note: The transmitter power switch must be in the OFF position!*

**HANDHELD:** Unscrew the battery compartment cover on the lower end of microphone. Install a fresh 'AA' alkaline battery and replace the cover.

**BODY-PACK:** Open battery cover on the side of the transmitter box and insert a fresh 9 Volt alkaline battery. Close the cover.

### Operating the wireless microphone system

1. Set volume control of the AN-100 to minimum, then turn the power switch ON.

2. Turn the wireless microphone ON as follows:

**Handheld:** Set switch to the top ON position and begin speaking. The middle STANDBY position functions as a mute switch.

**Bodypack Transmitter:** Insert the plug from the microphone into the jack marked "MIC" on the transmitter. Set power/frequency switch to the frequency of the receiver (either F1 or F2 as determined on page 8) and begin speaking.

3. Adjust the volume control to desired volume.

***Caution:** Harmful feedback may occur when walking in front of a sound system or speaker with a wireless microphone. Always point mic away from speakers.*