

Troubleshooting Guide

Having trouble with the sound system?

<i>Condition</i>	<i>Possible Solution</i>
No sound (power LED not lit):	<ul style="list-style-type: none">• Turn power (PWR) switch on• Replace fuse
No sound (power LED lights):	<ul style="list-style-type: none">• Check for output from source• Make sure all cables are completely plugged in• Increase volume control on input used
Distorted sound:	<ul style="list-style-type: none">• Check input cable connection• Lower input signal level
Excessive hum or noise:	<ul style="list-style-type: none">• Use shielded input cable• Use a balanced input

Having trouble with the wireless system?

<i>Condition</i>	<i>Possible Solution</i>
No sound (TX ON indicator lights):	<ul style="list-style-type: none">• Set MUTE switch to on position• Turn up WIRELESS MIC VOLUME control• Plug a mic into belt-pack transmitter
No sound (TX ON indicator off):	<ul style="list-style-type: none">• Turn sound system on• Turn transmitter power switch on• Replace battery in transmitter

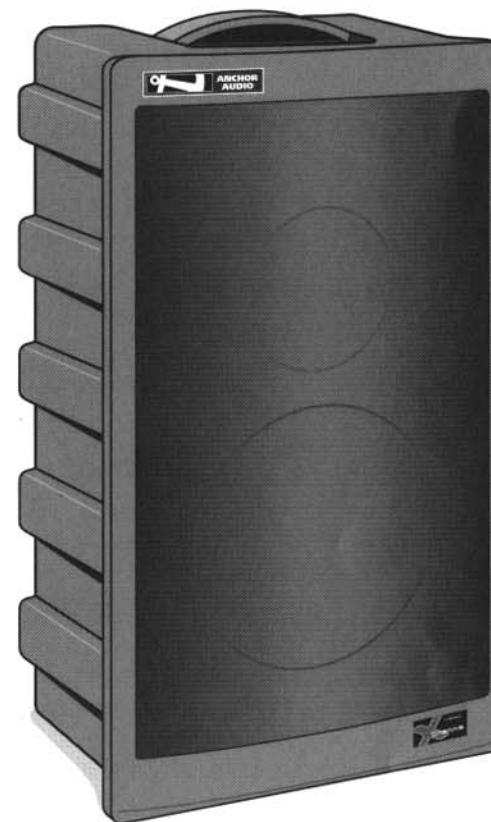


Anchor Audio, Inc.

Tel (800) 262-4671 or (310) 784-2300 • Fax (310) 784-0533

www.anchoraudio.com

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**MPA-5500
LIBERTY**
Xtreme
Owner's Manual





Important Safeguards



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



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

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



AVIS
RISQUE DE CHOC
ELECTRIQUE
NE PAS OUVRIR



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 ON UNIT

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you 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 you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the unit.

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

MPA-5500

Rated power output:	Stand-alone	w/MP-5501 companion
low frequency amp:	90 watts	125 watts
high frequency amp:	40 watts	55 watts
Max SPL @ rated power:	116 dB music mode, 123 dB project mode	
Frequency response:	80 Hz - 15 kHz (project mode: +7 dB from 2 - 12 kHz)	
Bass/Treble control:	8 db cut/boost @ 100 Hz, 8 kHz	
Line input:	1/4" phone, Hi-Z, unbalanced	
Mic input:	XLR female, Lo-Z, 15 VDC phantom power	
Balanced input:	XLR female, switchable mic/line level 15 VDC phantom power (switchable)	
Anchor CD input:	audio and power for Anchor CD-1 player	
Sensitivity for rated output:		
unbalanced line:	-18 dBV (125 mVrms)	
balanced mic:	-58 dBV (1.25 mVrms)	
balanced input:		
mic:	-58 dBV (1.25 mVrms)	
line:	-15 dBV (175 mVrms)	
Line output (post fader):	XLR male, 600Ω, active balanced	
Speaker Output:	4-pole Neutrik Speakon® jack for use with Anchor MP-5501	
AC power requirements:	110 - 125 VAC, 50/60 Hz, 250 watts max. or (factory configurable) 210 - 240 VAC, 50/60 Hz, 250 watts max. (250 watts maximum)	
AC accessory outlet:	110 - 125 VAC, 50/60 Hz, 500 watts max. 210 - 240 VAC, 50/60 Hz, 500 watts max. (500 watts maximum)	
Dimensions (HWD):	22.5 x 13 x 10", 57 x 33 x 26 cm	
Weight:	35 pounds, 16 Kg.	

Specifications subject to change without notice.



Accessories

MIC-90 Handheld Microphone

Anchor Audio's dynamic, balanced, low impedance microphone with unidirectional pick-up pattern. It features an on/off switch and comes with a 20' cable and mic clip.

SS-450 Speaker Stand

Made of heavy duty structural aluminum.

VL-45 Storage Cover

Heavy duty cover for the Liberty Xtreme.

MP-5501

Unpowered companion speaker

EX-101M

100' cable for MP-5501

EX-50M Microphone Cable

50' mic extension cable.

MSB-201 Microphone Stand and Boom

Microphone floor stand with 33" adjustable boom.

FL-4500 Admiral Lectern

Floor model lectern, with center console, to accommodate a Liberty sound system. It has a shock-mounted mic input.

PWRADPTR AC Power Cord Adapter

Xtreme AC outlet to standard USA 3-prong female receptacle. Allows use of standard extension cable.

PWRCORD-50 AC Power Cord

50' AC power cord for Accessory Outlet; IEC-320 connectors on both ends (male to female).

CD-1 Portable CD Player

Portable CD player module, mounted on speaker stand, with microphone tray/holder and cable.

EX-50PP Line Cable

50' shielded line cable; 1/4"-phone connectors on each end.

EX-50XFP Line Cable

50' shielded line cable; XLR female to 1/4"-phone connectors.

DCM Wireless System Interconnect Cable

Connects DC power from sound system to receiver, and audio output from receiver to input of sound system.

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 you've shown by selecting an Anchor Audio system.

Please take a few minutes to review this Owner's 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 our system.

David Jacobs, President on behalf of all Anchor Audio employees



Quick Use Guide

The Liberty Xtreme is an AC-powered portable sound system optimized for applications requiring extremely loud, clear sound. It has several signal input options, and a line output to connect to other systems. The Project mode allows you to specify use in either speech applications (indoors or outdoors), or standard applications (music and indoors).

You'll need a microphone or some other input source before you get started.

"Sound" Advice:
Problems?
Consult the
Troubleshooting
Guide on the
back page of
this manual.

Here's how easy it is to use

1. Set unit on floor, table or speaker stand in front of audience.
2. Set all input level controls to minimum, Bass and Treble to 12:00 position before turning power (PWR) on.
3. Plug a microphone into Mic In or Balanced Input jack (XLR); the input level (blue button) should be in the "in" position. Or, plug an audio source into Line In or Balanced Input jack. If using Balanced Input jack, the input level should be in the "out" position.
4. Plug the power cord in. Press PWR on (the red LED near the switch will light).
5. Slowly increase the level control adjacent to the Input jack used to desired volume.
6. For speech applications, Project should be "on" to overcome ambient noise. For standard applications (music and indoors), Project should be "off."
7. Adjust Bass and Treble controls for desired sound quality.

To operate the WIRELESS MIC system on wireless models, see "Wireless Operation" on pages 12 and 13 of this manual.



Getting Started

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

Inspection and inventory of your system

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

Inventory

- Liberty Xtreme sound system
- Warranty registration card
- Wireless mic/transmitter (with wireless option only)

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 Audio must include an RA number and be shipped prepaid. C.O.D. shipments will be refused and returned at your cost.

Warranty registration

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



Wireless Operation

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 the microphone. Install a fresh 9 volt alkaline battery* and replace the cover.

BODY-PACK: Press the "OPEN" end of the battery cover, slide it back and lift the cover. Install a fresh 9 volt alkaline battery.*

Be sure to observe proper polarity. Close the cover.

"Sound" Advice:
*Duracell®
MN1604 or
equivalent.

Operating the wireless microphone system

The audio signal from the built-in wireless receiver is fed into the mixing bus. The wireless mic may be used simultaneously with any of the other inputs.

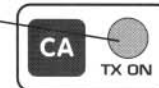
Operating the wireless microphone system:

1. Set the wireless volume control to minimum.
2. Turn the sound system power switch ON.
3. Slide the transmitter power switch to PWR.

The sound system's TX ON indicator lights to indicate wireless signal (RF) is being transmitted and received.

4. Adjust the wireless control to desired volume level.

WIRELESS
MIC 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.



Using the microphone ON/MUTE switch:

When set to the "ON" position, the mic operates normally. To prevent unwanted sounds from being picked up without turning the transmitter off, move switch to the "MUTE" position.

(The handheld mic/transmitter comes with a protective sleeve, which fits over the power and mute switches to prevent accidental movement during use. To install it, unscrew the battery cover and slide the sleeve onto the microphone handle. Replace the cover.)

Wireless Operation

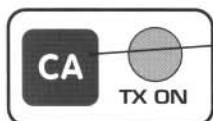


Setting up the wireless system

Checking the Frequency Code:

Before proceeding, first verify that the wireless frequency of your transmitter matches the frequency of the receiver installed in your Anchor Audio sound system.

1. The control panel of the sound system should have the following label:



Frequency Code label

(Shure designates a one- or two-letter code, which corresponds to the wireless frequency at which the component operates.)

2. The frequency code must match the code found on the transmitter, as described below:

HANDHELD: Unscrew the battery compartment cover on lower end of the microphone. Remove the battery (if installed) and check code on the label.

Label on **handheld** mic/transmitter

SHURE BROTHERS INC.
LX2 HANDHELD TRANSMITTER
FREQUENCY CODE - **CA**
176.200 MHz

SHURE BROTHERS INC.
TX FCC ID: DD4L11
CANADA: 616 C9398
LX1 - **CA** 176.200 MHz

Label on **body-pack** transmitter

BODY-PACK: Check the code on the label located behind the belt clip.

3. If the frequency codes do not match, locate the correct transmitter whose code matches the sound system.

About the transmitter battery gauge/indicator

Assuming a battery is installed in the transmitter, you can estimate the remaining operating time by first turning the sound system off, or setting the transmitter mute switch to the MUTE position. Then slide the power switch to the PWR position, and observe the color of the LED indicator(s) that light up:

Battery LED Indicator

Green
Green & amber
Amber
Red

*Operating Times

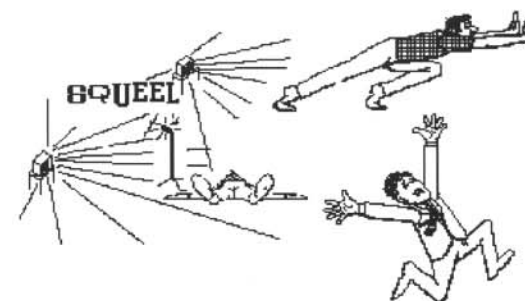
6 - 20 hours
4 - 6 hours
2 - 4 hours
< 1 hour

"Sound" Advice:
Operating times*
using a fresh
9 volt alkaline
battery, Duracell®
MN1604 or
equivalent.

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 and then re-amplified by the system. This can form a self-sustaining loop, that can damage the sound system if allowed to continue for any length of time.



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 the unit on. If feedback occurs, immediately reduce the volume.

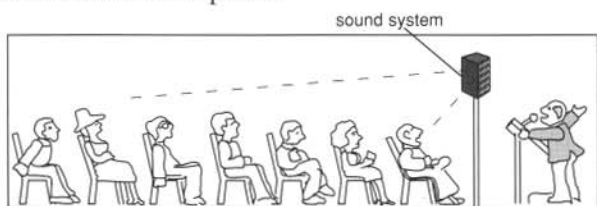
Setting up the Liberty Xtreme sound system

Positioning the speaker(s) is perhaps the most important consideration when setting up a sound system. You should survey the location prior to the activity and observe the seating arrangement and area of coverage.

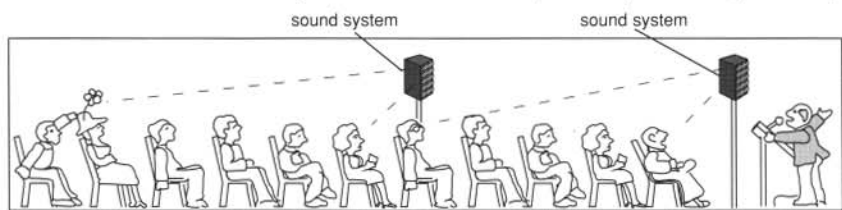
"Sound" Advice:
The best sound system set-up is when the audience is not conscious of a sound system being used.

Basic principles of sound system set-up:

- Position your sound system in front of the audience and ahead of the microphone.



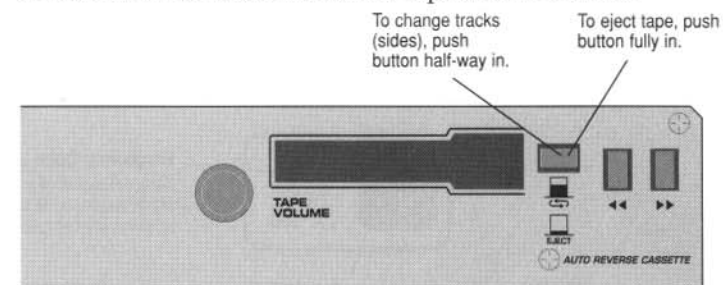
- Elevate the sound system so the sound projects *over* the front listeners. This permits sound to reach the listeners in the rear, without overpowering those in the front. The Liberty is easily and safely elevated by using Anchor Audio's SS-450 speaker stand.
- For long and narrow seating arrangements, position one sound system in front and off to one side of the audience. Then position a second sound system mid-way back on the same side of the audience. Direct the speakers diagonally across the audience (see Daisy Chain operation).



- Daisy Chain operation:** There may be times when the crowd size requires more than one sound system, or when part of the audience is in a separate listening area. To use multiple Liberty Xtreme systems, connect a shielded mic cable between the Balanced Line Out of the primary sound system to the Balanced Line In of the second system. Set the volume on the second system, and

Using the cassette tape player

The cassette tape player features auto reverse for continuous playback. The audio signal is fed directly into the mixing bus, so the sound can be mixed with other inputs of the Xtreme.



Note: Use only high-quality tapes. Periodically clean tape heads with a cleaning kit.



Balanced Line Out

Balanced Line Out

The Balanced Line Out provides a balanced, composite signal of the inputs being used. You can use this function to record your presentation, or to “daisy chain” another powered sound system to the Xtreme for greater crowd coverage.



Accessory Outlet

Accessory Outlet

Use the Xtreme 5500's Accessory Outlet to supply AC power to an additional sound system or accessory. Anchor Audio's PWRADPTR or PWRCORD cables allow easy connection when running extension cables.



Project Switch

The Project switch allows you to customize the sound output of the Xtreme for a particular application:

Standard Setting (button out):

The Xtreme provides flat, full-range frequency response for music/singing or indoor vocal applications.

Project Setting (button in):

Frequencies in the vocal range (800Hz-12KHz) are boosted for added clarity and efficient projection. Use for outdoor functions, large crowds and speech applications.

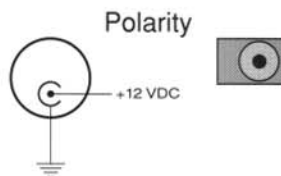
“Sound” Advice:
To control feedback, try attenuating the Bass or Treble controls.



12 VDC Out
(300 ma MAX)

12 VDC Out

The 12 VDC Out jack is used to power auxiliary equipment such as an outboard wireless receiver, or Anchor Audio's Mini-Mix. Rated output is 12 VDC, 300 ma maximum.

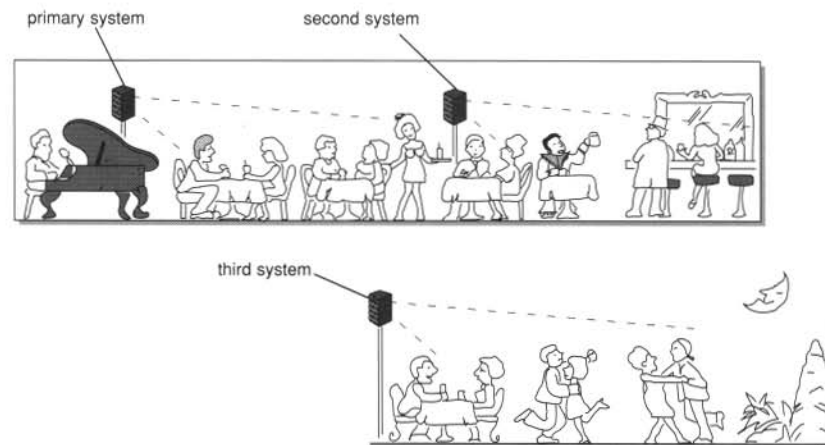


Speaker Out
(use Anchor MP-5501 only)

Speaker Out

Use this output to power the MP-5501 companion speaker for greater sound coverage/distribution.

thereafter the volume of the primary Liberty Xtreme will control both units. For a more simplified configuration, connect the Speaker Out of the MPA-5500 to a MP-5501 using an EX-101M. This will eliminate the need for ac power to the companion system.



Setting up difficult rooms

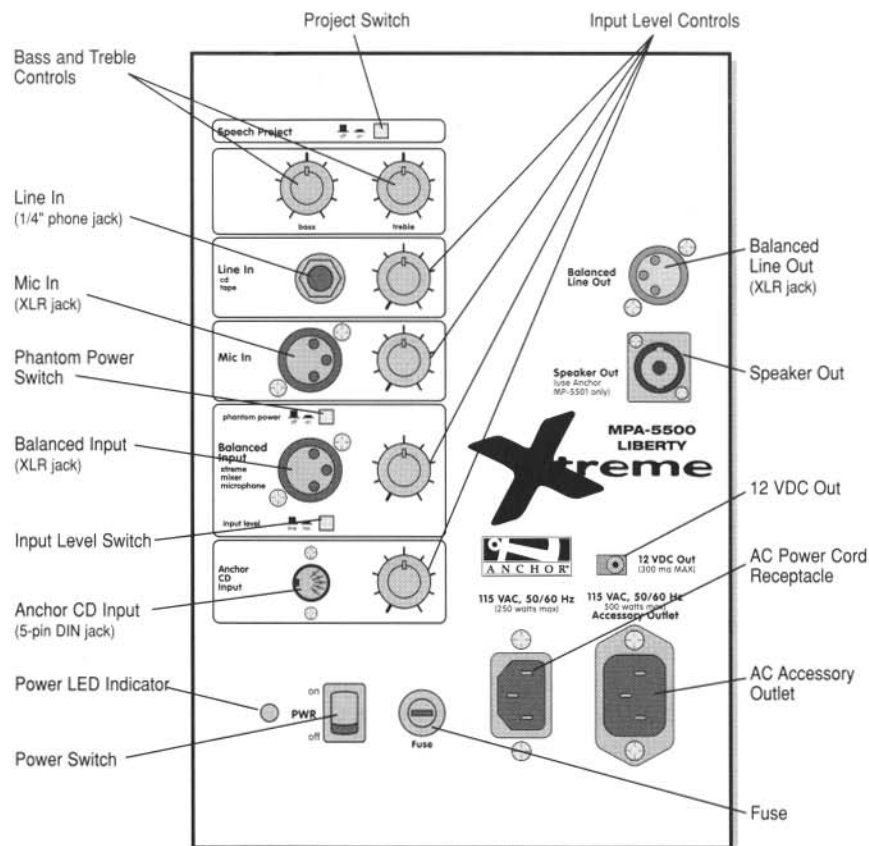
Reverberant rooms—those with acoustically-reflective surfaces like glass or concrete (such as a gymnasium)—can be troublesome when using a sound system. Proper care must be taken during set-up to minimize feedback, which is caused by the microphone ‘hearing’ the sound reflected back from the walls, floors and ceilings.

Techniques to reduce feedback in difficult rooms:

- The best microphones to use in feedback-prone rooms are handheld, CollarMic™ or headset boom types. They allow the mic element to be close to the mouth, so the system ‘sees’ more of the user’s voice and less of the room. The volume control can be turned down while still maintaining an adequate sound level—another important factor in reducing feedback.
- Orienting the speakers directly at the crowd and away from the walls (and the user), will help reduce feedback. Experimentation may be necessary.

“Sound” Advice:
A lapel mic will perform poorly under these conditions and should not be used.

Liberty Xtreme 5500 Control Panel



Operating the sound system

1. Set unit on floor, table or speaker stand in front of audience.
2. Set all input level controls to minimum, Bass and Treble to 12:00 position before turning power (PWR) on.
3. Plug a microphone into Mic In or Balanced Input jack (XLR); the input level (blue button) should be in the "in" position. Or, plug an audio source into Line In or Balanced Input jack. If using Balanced Input jack, the input level should be in the "out" position.
4. Plug the power cord in. Press PWR on (the red LED near the switch will light).

"Sound" Advice:
Refer to feature-specific info for more details on Xtreme's functions and operation.

5. Slowly increase the level control adjacent to the Input jack used to desired volume.
6. For speech applications, Project should be "on" to overcome ambient noise. For standard applications (music and indoors), Project should be "off."
7. Adjust Bass and Treble controls for desired sound quality.

Line In

Line In
CD tape



The unbalanced Line In is used for playback of a tape or CD player, musical instrument, VCR or a similar line-level source. It may be combined with the other inputs for a composite output.

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

Mic In

Mic In



The balanced, low impedance XLR Mic In is used with a balanced microphone, to help prevent hum or interference when using long cables. It features phantom power for use with condenser-type microphones.

Balanced Input

phantom power

Balanced Input
Xtreme mixer microphone

input level



The Balanced Input (XLR) jack can be set to allow microphone or line level sources, with or without phantom power (15 VDC). A balanced microphone (Lo-Z) is preferred for use with long cables, to minimize hum and interference. Phantom power is required when using mics with a condenser element; in all other cases, the phantom power switch should be set to off.

Anchor CD Input

Anchor CD Input



The Anchor CD Input provides an audio and power connection for the CD-1 player accessory.