Troubleshooting Guide

Having trouble with the sound system?

| Condition	Possible Solution
No sound (power LED not lit):	• turn POWER switch ON • replace fuse
No sound (power LED lights):	• check for output from source • make sure all cables are completely plugged in • increase volume control on input used
Distorted sound:	• check input cable connection • lower input signal level
Excessive hum or noise:	• use shielded input cable • use a balanced microphone
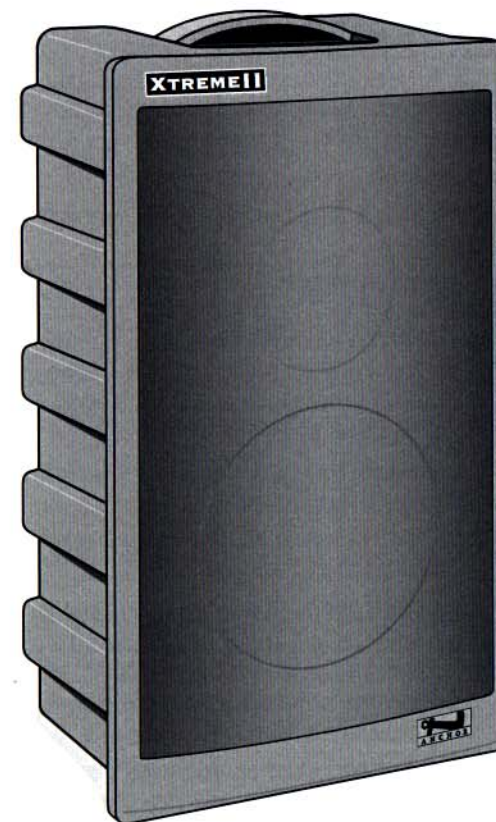
XTREMEII
MPA-5200
Owner's Manual
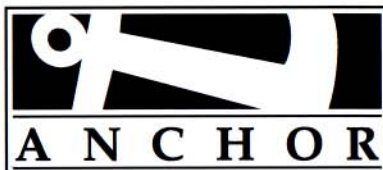
Important Safeguards

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 eviter les risques de choc électrique, ne pas enlever le couvercle. Aucun entretien de pièces intérieures par l'usager. Confier l'entretien au personnel qualifié.

AVIS: Pour eviter les risques d'incendie ou d'électrocution, n'exposez pas cet article à la pluie ou a 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 presence à l'intérieur du coffret de "voltage dangereux" non isolé d'ampleur suffisante pour constituer un risque d'elétrocution.

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 can be determined by the serial number code. The sixth digit from the right denotes the month (A=Jan, B=Feb, etc.), and the fifth digit from the right denotes the year. Example: "MPA5200J10983" indicates the unit was manufactured in October of 2001.

Specifications

MPA-5200

Rated power output:	
low frequency amp:	90 watts @ 4Ω continuous
high frequency amp:	40 watts @ 16Ω continuous
Max SPL @ rated power:	122 dB project mode, 115 dB music mode

General

Frequency response:	80 Hz - 15 kHz
	(project mode: +8 dB from 2 - 12 kHz)
Speaker type:	8" woofer, constant-directivity horn
Tone control:	8 db cut / 8 db boost @ 8 kHz

Inputs

Balanced input:	XLR male, switchable mic/line level
	15VDC phantom power (switchable)
Unbalanced input:	1/4"-phone, Hi-Z, unbalanced
Sensitivity for rated output:	
Balanced Mic:	-58 dBV (1.25 mVrms)
Balanced Line:	-6 dBV (500 mVrms)
Unbalanced Line:	-20 dBV (100 mVrms)

Outputs

Line output (post fader):	XLR male, 600Ω, active balanced
AC power requirements:	110 - 125 VAC, 50/60 Hz
export model:	210 - 240 VAC, 50/60 Hz
	(250 watts maximum, 30 watts idle)
AC accessory outlet:	110 - 125 VAC, 50/60 Hz
export model:	210 - 240 VAC, 50/60 Hz
	(500 watts maximum)
Fuse rating:	T 3.15A / 250V
export model:	T 1.6A / 250V
Dimensions (HWD):	22.5 x 13 x 10", 57 x 33 x 26 cm
Weight:	34 pounds, 15.5 Kg.

Specifications subject to change without notice.

Accessories

MIC-90 Handheld Microphone
Anchor's dynamic, balanced, low impedance microphone with a unidirectional pick-up pattern. It has an on/off switch and comes with a 20' cable and mic clip.

SS-550 Speaker Stand
Made of heavy duty structural aluminum.

VL-45 Storage Cover
Heady duty cover for Liberty.

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 a center console to accommodate a Liberty sound system. It has a shock-mounted mic input.

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

Quick Use Guide

Xtreme is an AC-powered sound system optimized for applications requiring very loud, clear sound. It has several signal input options, and a line output to connect with other systems. The selectable sound mode feature makes it ideal for both music and speech applications, indoors or out.

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

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

Here's how easy it is to use

1. Set the unit in front of your audience on the floor, table or on a speaker stand.
2. Plug a microphone into the balanced mic input XLR jack, or plug an audio source into a line input.
3. Set both input level controls to minimum, and set the tone control to the 12:00 position.
4. Plug the power cord in, then turn the power switch ON. Slowly increase the level control adjacent to (above) the input used until desired volume is reached.
5. For music and indoor applications, set the sound mode switch to *Music*.

   For speech and outdoor applications, set the sound mode switch to *Project*.
6. Adjust the tone control for desired sound quality.

For more detailed instructions, see the "Set-Up" section on pages 6 -7 and the "Operation" section beginning on page 8.

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

- Xtreme sound system
- Warranty 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.
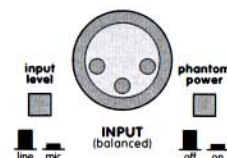
Balanced Input

Xtreme is equipped with a balanced XLR input jack that can be set to allow microphone or line level sources, with or without phantom power (15 volts DC). A balanced microphone (Lo-Z) is preferred for use with long cables in order 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.

Line Input

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

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

Line Output

The line output provides a balanced, composite signal of the inputs being used. Use the line output to record your presentation, or to "daisy chain" another powered sound system to the Xtreme for greater crowd coverage.

Sound Mode Switch

The sound mode switch allows the user to customize the sound output of the Xtreme for a particular application:

Using the music mode (button out):

Xtreme provides flat, full-range frequency response for music/singing or indoor vocal applications.
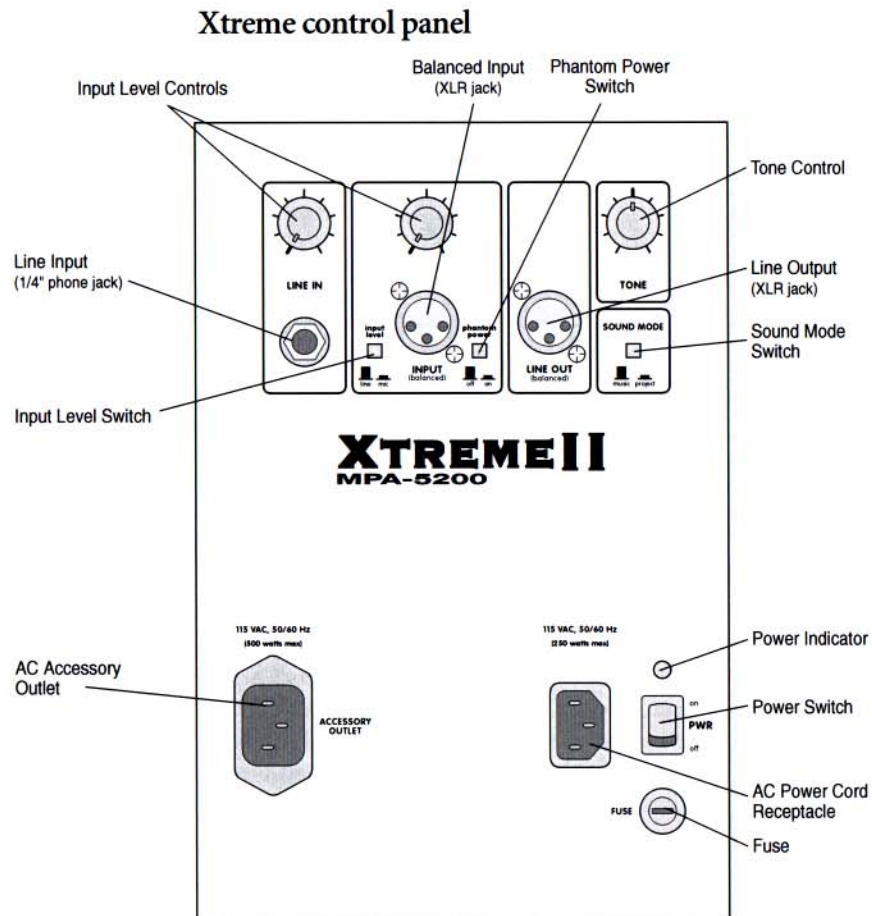
Using the project mode (button in):

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

Xtreme control panel

Input Level Controls

Balanced Input (XLR jack)

Phantom Power Switch

Tone Control

Line Input (1/4" phone jack)

LINE IN

TONE

Line Output (XLR jack)

Input level

INPUT (balanced)

phantom power

LINE OUT (balanced)

SOUND MODE

Sound Mode Switch

Input Level Switch

XTREME II
MPA-5200

AC Accessory Outlet

115 VAC, 50/60 Hz (500 watts max)

ACCESSORY OUTLET

115 VAC, 50/60 Hz (250 watts max)

Power Indicator

on

PWR

off

Power Switch

AC Power Cord Receptacle

FUSE

Fuse

Operating the sound system

1. Set both input level controls to minimum and tone to 12:00 position before turning the power on.

2. Plug a microphone into the balanced input jack or connect an audio source to a line input jack.

3. Turn power ON (red LED above switch will light).

4. Adjust the level control located above the input used to desired volume level.

5. Adjust the tone control (and sound mode switch, if necessary) for desired sound.

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.

SQUEEL
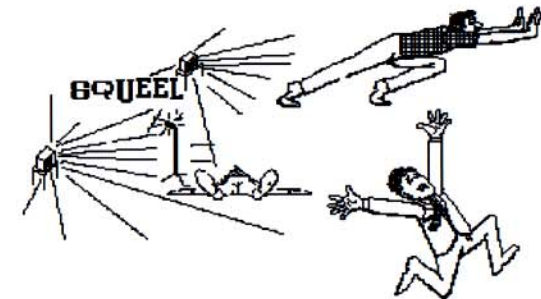
How to prevent feedback

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.*

Setting up the Xtreme sound system

Positioning of the speaker 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.

Basic principles of sound system set up:

Keep in mind, the best sound system set-up is when the audience is not conscious of a sound system being used.

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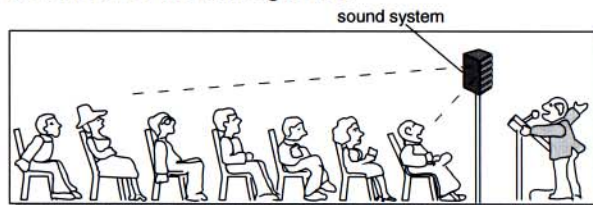
sound system

- 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 front. The Xtreme is easily and safely elevated above the audience by using Anchor's SS-550 speaker stand.
- For long and narrow seating arrangements, position one sound system in front and off to one side of the listeners. Then position a second sound system midway back on the same side of the audience. Direct the speakers diagonally across the audience (see notes regarding daisy-chaining below).
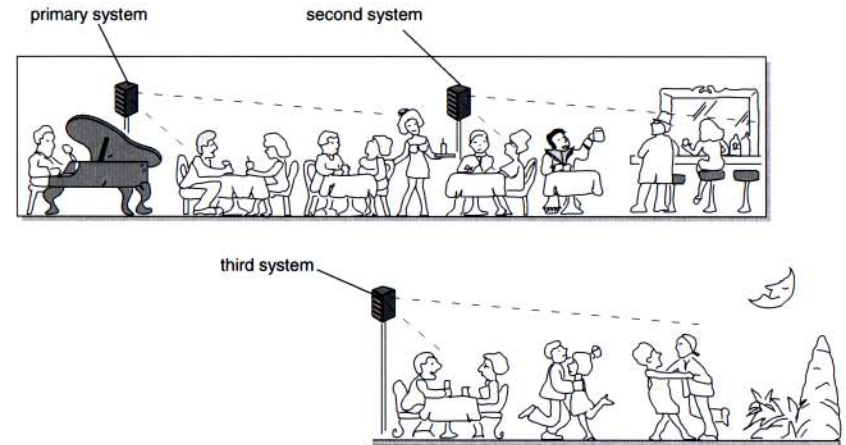
sound system   sound system
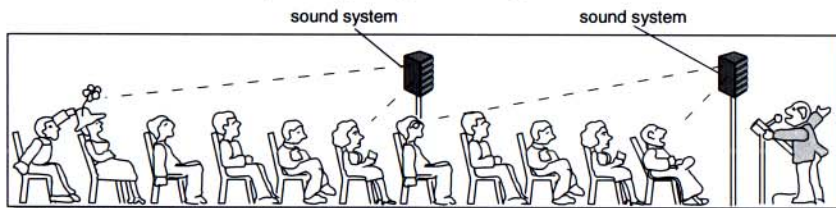
- **Daisy Chain operation:** There may be times when the crowd size requires more than one sound system, or when part of the audience is in a separate listening area. To use multiple Xtreme systems, connect a shielded mic cable between the Line Output of the primary sound system to the Balanced Line Input of

the second system. Set the volume on the second system, and thereafter the volume of the primary Xtreme will control both units.

primary system   second system

third 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 used during setup 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:

A lapel mic will perform poorly under these conditions and should not be considered.

- 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 users 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, or course) will help reduce feedback. Experimentation may be necessary.