

# ULTRALITE P.A.210



GROOVE FACTORY AUDIO

# CONTENTS

INTRODUCTION .....	3
USING THIS MANUAL .....	3
SYSTEM FEATURES .....	4
INSTALLATION.....	5-6
SIGNAL ---- .....	7
FRONT PANEL CONTROLS & CONNECTIONS .....	8
SPECIFICATIONS .....	10
SERVICE INFORMATION .....	10



# INTRODUCTION

*Congratulations on your choice of a portable sound system —*

you have purchased one of the finest portable sound systems on the market today. This unit was developed using the expertise of professional sound engineers and working musicians. You will find that your new Ultralite portable sound system has superior performance and greater flexibility than any other portable sound system in its price range. Please read this manual carefully to get the most out of your new unit.

*Thanks for selecting the Ultralite as your choice in portable sound systems.*

## **USING THIS MANUAL**

This booklet provides information regarding the use of the Ultralite portable sound system. It includes detailed instructions, description of features and step-by-step guides to operating. This should answer any questions about the operation and servicing of this system.



# SYSTEM FEATURES

## Ultralite PORTABLE SOUND SYSTEM

- Ultra compact portable PA system with 2 speakers and detachable 8-channel powered mixer
- Lightweight (21 lbs) for easy transport and set up. Speakers are pole mountable on optional SPST-1A speaker stands.
- Dual 150W Class D amplifier, with built in peak limiter
- Full range 10" woofers and 1" titanium high-frequency drivers
- XLR mic, ¼" line , and stereo RCA inputs. All inputs with 2 band EQ, reverb, and level controls, L/R stereo and monitor outputs.
- Built-in media player with USB/SD/Bluetooth playback functionality
- Rear storage compartment for cables and accessories

## SAFETY TIPS & WARNINGS:

1. When using this electronic device, basic precautions should always be taken, including the following: read all instructions before using the product.
2. Do not use this product near water (e.g., near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, etc.).
3. This product should be used only with a cart or stand that will keep it level and stable and prevent wobbling.
4. This product, in combination with headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be positioned so that proper ventilation is maintained.
6. The product should be located away from heat sources such as radiators, heat vents, or other devices (including amplifiers) that produce heat.
7. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
8. The power supply cord should: (1) be undamaged, (2) never share an outlet or extension cord with other devices so that the outlet's or extension cord's power rating is exceeded, and (3) never be left plugged into the outlet when not being used for a long period of time.
9. Care should be taken so that objects do not fall into, and liquids are not spilled through, the enclosure's openings.
10. The product should be serviced by qualified service personnel if:
  - a. The power supply cord or the plug has been damaged.
  - b. Objects have fallen into, or liquid has been spilled onto the product.
  - c. The product has been exposed to rain.
  - d. The product does not appear to operate normally or exhibits a marked change in performance.
  - e. The product has been dropped, or the enclosure damaged.
11. Do not attempt to service the product beyond what is described in the user maintenance instructions. All other servicing should be referred to qualified service personnel.

# INSTALLATION

*To ensure years of enjoyment from your Ultralite Portable Sound System, please read and understand this manual thoroughly before using the unit.*

## 1. INSPECTION

Your Ultralite Portable Sound System was carefully packed at the factory in packaging designed to protect the units in shipment. Before installing and using your unit, carefully examine the packaging and all contents for any signs of physical damage that may have occurred in transit.

[Please note: Ultralite is not responsible for shipping damage. If your unit is damaged, do not return to Ultralite, but notify your dealer and the shipping company (if shipped to you) immediately to make a claim. Such claims must be made by the consignee in a timely manner.]

### CONTENTS:

- Mixer Section
- Left Speaker
- Right Speaker
- (2x) 2 18' Speaker Cables
- AC cord
- Instruction Manual

## 2. SETUP

After transporting the Ultralite to the desired location, stand the unit upright so that the feet of the speaker are down on an even surface. Unlock and carefully remove the amplifier from the back of the speaker if desired and place on a flat surface. Unlock the accessory panel of the 2nd speaker to retrieve the included speaker and power cables. Replace the accessory panel and lock back into place. The speakers can now be mounted to any standard speaker stand with 35mm pole.

### Mixer Section

Position the Ultralite mixer section on its flat surface with the control panel facing up. Parts of the unit can become very warm during use. This is normal during operation. Care should be taken to ensure that there is enough space behind the Mixer Section for cooling. Also, do not place the Portable Sound System on high temperature devices such as power amplifiers, etc., or the unit may overheat in operation.

Although the Ultralite is shielded against radio frequency (RF) and electromagnetic interference (EMI), extremely high fields of RF and EMI should be avoided.

Please make sure that the power is rated properly for the required voltage (110VAC/60 Hz). Power requirements for electrical equipment differ from area to area. In new installations and portable sound systems, or any situation in which the AC power is in question, it is wise to confirm the voltage before connecting it to power sources.

Europe (except UK): 230V, 50Hz UK and Australia: 240V, 50Hz USA and Canada: 120V, 60 Hz  
For other areas, please check with local authorities.



# INSTALLATION

## Speakers and Stands

To set up, fully extend the speaker stand tripod legs and tighten the base screw. Extend the pole of the stand to the desired height and insert the safety pin completely through the stand hole above the pole thumbscrew. Lower the pole so that the pin rests on the holder and tighten the pole thumbscrew.

Setup the stands on a flat surface where the speakers will be located and not disturbed. Place the speakers on the stands and position them as desired, and tighten the included bolt on the speaker mount until secured to the pole. Note: facing the speakers towards any of the microphones connected with the PAS-300BT will increase the chance of feedback.

Connect the speaker cables to the input jacks on the lower left front panel of both the Left and Right speakers. Connect the other end of each cable to the corresponding Left and Right speaker outputs on the rear panel of the PAS-300BT mixer section. Position the length of the cables so they will not be a safety hazard to people.

**WARNING:** Connect only the supplied speakers to the Ultralite system. Never connect additional passive speakers to the Ultralite.

## Inputs

Connect all sound sources to the appropriate inputs i.e., microphones, keyboards, CD players, karaoke machines.

When ready to operate, plug the AC cord into the power source. Make sure that the unit is turned off before connecting to the AC power source to avoid possible loud transients, which can damage your speakers or your ears. Before turning on, connect up the speakers and all inputs and outputs desired and turn down the Master Volume.



# SIGNAL FLOW

## MICROPHONE INPUTS

(4) XLR JACKS  
WITH 3 BAND EQ  
AND EFFECTS  
+ PHANTOM POWER

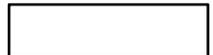
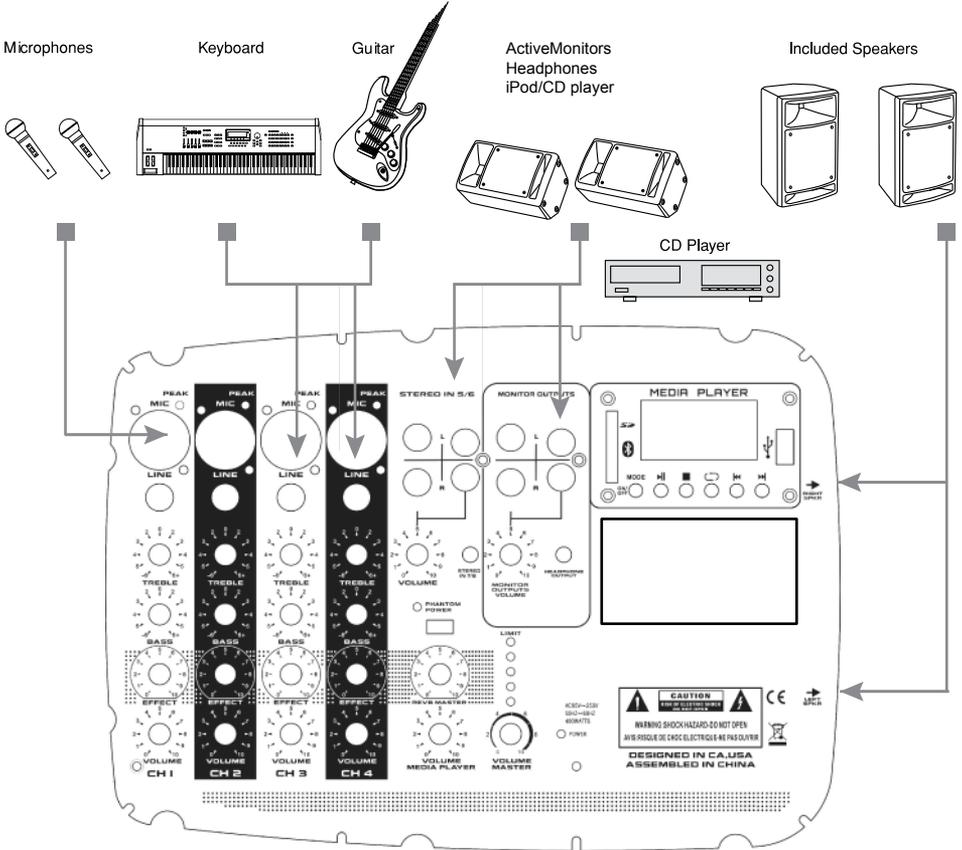
## INSTRUMENT INPUTS

(4) 1/4" JACKS  
WITH 3 BAND EQ  
AND EFFECTS

## MONITOR OUTS

(L/R) 1/4" CABLES  
(L/R) RCA  
1/8" AUX JACK

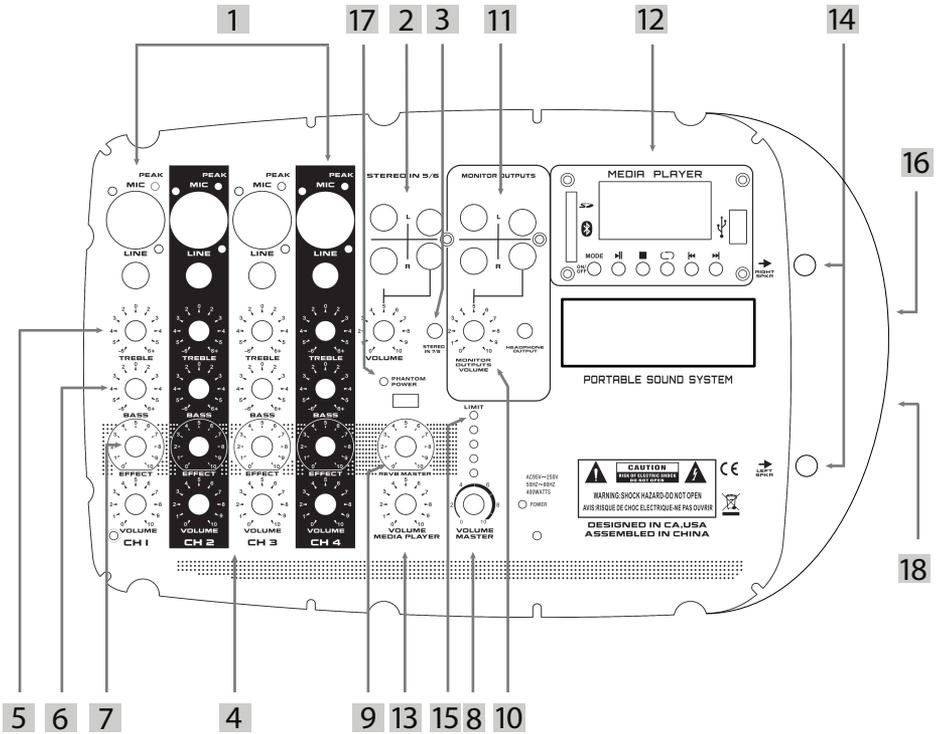
**MAIN OUT (L/R)**  
(2) 1/4" CABLES



## FRONT PANEL CONTROLS & CONNECTIONS

- 1. CHANNEL 1-4 XLR / ¼" INPUT** - The XLR mic inputs are an electronically balanced XLR type designed to accept mic level signals from any balanced or unbalanced low impedance (Low Z) microphone. The XLR jacks are configured for: Pin1 = ground, Pin2 = positive (+), Pin3 = negative (-). The ¼" mono line inputs are designed to accept unbalanced line level signals such as those from keyboards, drum machines, or samplers.
- 2. CHANNEL 5/6 STEREO 1¼" / RCA INPUTS** - The TS ¼" or stereo RCA line level inputs can be used for connecting CD players, Tape Decks, and other audio equipment with line level outputs.
- 3. CHANNEL 7/8 STEREO 1/8" INPUT** - The stereo 1/8" line level input can be used for connecting CD players, Tape Decks, and other audio equipment with line level outputs.
- 4. DELAY CONTROL** - The DELAY CONTROL knobs can be used to add an effect to the mic or line input on any of the inputs 1-4. Adjust the REVERB MASTER knob and control the individual channels REVERB CONTROL by using the knobs on channels 1-4.
- 5. TREBLE CONTROL** - Turn to the right to boost high frequencies, adding crispness to percussion from drum machines, cymbals and synths. Turn to the left to cut these frequencies, reducing sibilance or hiss. The control has a shelving response giving +/-10dB of boost or cut at 10kHz.
- 6. BASS CONTROL** - The bass control shelving response gives 10dB of boost or cut at 100Hz. Add warmth to vocals or extra punch to guitars, drums and synths by turning to the right. Turn to the left to reduce stage rumble, hum or to improve a mushy sound.
- 7. CHANNEL FADER** - The channel faders determine the output signal level to the Master Mix bus. It offers a smooth logarithmic taper, more often associated with much more expensive consoles, for optimum control of the signal.
- 8. MASTER FADER** - The master fader determines the output signal level of the Master Mix bus. They offer a smooth logarithmic taper more often associated with much more expensive console for optimum control of the signal.
- 9. DELAY MASTER KNOB** - The REVERB master knob is used to adjust the amount of reverb added to all channels.
- 10. MONITOR VOLUME KNOB** - The monitor volume knob controls the output level of the line and stereo RCA record out. Note that the monitor out is intended to be used with powered speakers or other devices that require no additional (wattage) power.
- 11. MONITOR OUT** - There are 2 ¼" TS / RCA connectors, as well as a 3.5mm jack for headphone monitoring, that can be used to connect to powered speakers or any device not requiring additional (wattage) power.
- 12. MEDIA PLAYER** - The PAS-300BT features a USB/SD/Bluetooth media player built-in. Simply load a USB drive or SD card with desired MP3s, and push the MODE button until the USB or SD media is selected. Next use the on-board playback controls for play, pause, rewind, fast forward and play. When using BT, push the MODE button until the word Bluetooth appears. You will hear a beep tone come from the speakers indicating it is in discovery mode. Next, pair with your media player and use the Media Player volume knob to adjust the level
- 13. MEDIA PLAYER VOLUME KNOB** - Controls the Media Player volume.
- 14. SPEAKER OUT** - The Ultralite has two ¼" TS connectors, which are powered outputs used to connect your left and right speakers. Use the included speaker cables to connect the speakers. CAUTION: The total impedance load for each side of the amplifier must not be less than 6 Ohms. Do not connect additional speakers to the Ultralite unless using monitor out section (please read above for more details).
- 15. POWER / PEAK INDICATOR** - The POWER LED will illuminate Green when the main power switch is turned on, and the red light will indicate the amplifier is near the clipping point. If the Peak indicator is consistently light up, turn down the MASTER volume or the individual channel faders until the indicator light does not flash consistently.
- 16. POWER SWITCH** - Use the power switch to turn the PAS-300BT on or off.
- 17. PHANTOM POWER** - Use the phantom power button to engage power on Ch.1-4 for devices such as condenser microphones that may require an additional 48 volts of power for operation.
- 18. IEC INLET** - Connect the supplied heavy gauge 3-pin IEC power cable here.

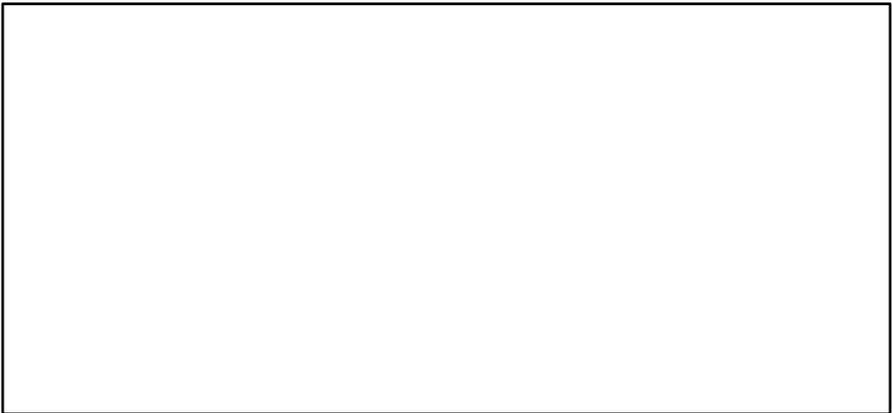
# FRONT PANEL CONTROLS & CONNECTIONS



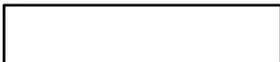
## SPECIFICATIONS

<b>OUTPUT POWER</b>	:120W per side into 4 $\Omega$ load
<b>OVERLOAD PROTECTION AMA™</b> <i>(Automatic Maximum Amplitude)</i>	Servo system limits the power amplifier input to prevent clipping distortion that can damage speakers
<b>FREQUENCY RESPONSE:</b>	40Hz to 20KHz at +/- 3dB
<b>TONE CONTROLS:</b>	Bass: 100 Hz $\pm$ 10 dB; Treble: 10 KHz $\pm$ 10 dB
<b>INPUT IMPEDANCE:</b>	1-4 Mic input: 3 K $\Omega$ , 1-4 Line input: 20K $\Omega$ , Ch. 5-6 TRS: 20K $\Omega$ , Ch. 5-6 RCA: 1 2K $\Omega$ , Ch. 7-8 3.5mm: 20K $\Omega$
<b>MAX GAIN:</b>	86 dB mic input to speaker output
<b>DISTORTION:</b>	Less than 0.8% THD at rated output
<b>ECHO EFFECT :</b>	DSP
<b>SPEAKERS:</b>	10" woofer and neodymium horn tweeter
<b>AC POWER:</b>	110 VAC (60 Hz)
<b>DIMENSIONS:</b>	Speaker(s) 18 ¼" x 10 ¾" x 9 ¾" (47.35 x 27.3 x 24.76 cm) Mixer: 11 ½" x 6" x 3 ½" (29.21 x 15.24 x 8.9 cm)
<b>WEIGHT:</b>	21.1 lbs-each, (9.53 k g) assembled

## SERVICE



**DO NOT ATTEMPT TO SERVICE THIS UNIT YOURSELF AS IT CAN BE DANGEROUS AND ALSO VOID THE WARRANTY**



**ONE YEAR LIMITED WARRANTY**

