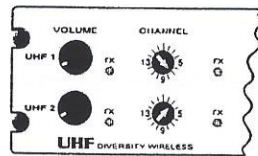## Diversity Wireless by Anchor Audio

Anchor Audio UHF wireless is a 16 channel, diversity wireless system that utilizes two independent antennae to receive signal. The diversity feature means that the receiver will process the stronger of the two antenna signals, effectively minimizing dropouts and interference from other transmitting sources. The antennae are mounted internally so there are no obstructions or risk of damage.

Receiver Channel Selection

NOTE: Before you use your UHF wireless system, you will need to select a wireless frequency channel. The wireless receiver is mounted inside the Liberty and can be set to any of 16 available channels.
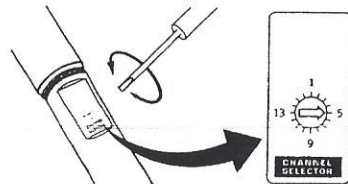
NOTE:
If you experience ongoing interference with your wireless system, the selected frequency may be incompatible with other RF systems in your area. Try a different channel.

1. Locate the Wireless Channel selector on the back panel.

2. Set the Channel (frequency) of the receiver to 1 thru 16.
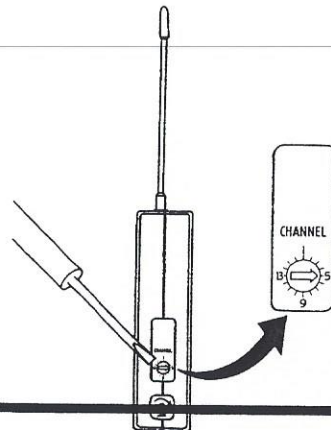
Transmitter Channel Selection

Handheld Transmitter:

1. Unscrew battery cover on lower end of microphone.

2. Set the channel selection dial to match the channel setting on the receiver.

3. Replace the battery cover.

Body-pack Transmitter:

1. The channel selection dial is located on the side of the transmitter.

2. Set the channel selection dial to match the channel setting on the receiver.

NOTE:
Be sure that the MIC/LINE switch is in the "MIC" position when a mic is plugged into the body-pack transmitter.

Wireless Microphone Operation

NOTE:
When using a dual wireless unit, make sure each microphone is set to a different channel frequency.

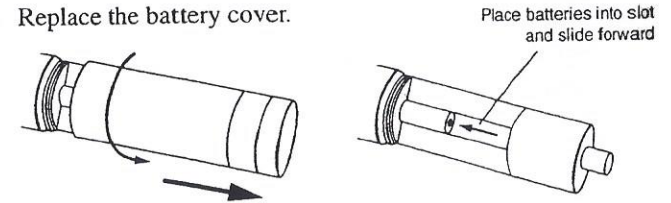Both the receiver and microphone must be set to the same channel.

1. If you are using a body-pack transmitter, insert the plug from the mic into the jack marked MIC on the transmitter.

2. Turn the transmitter power switch to ON.
(The red LED will flash when the mic is turned on. If the red LED stays on, the battery is low.)

3. Turn the Liberty power switch to ON.

4. The RX indicators will light (one indicator at a time lights) when the wireless signal is being transmitted and received.

Replacing Transmitter Battery

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.
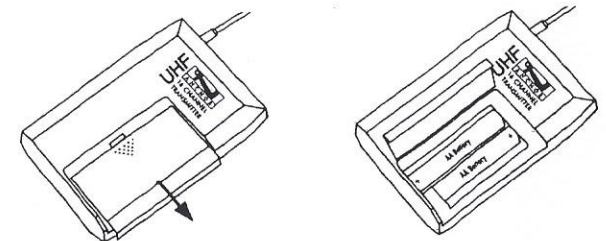
Handheld Transmitter:

1. Unscrew battery compartment cover on lower end of mic.

2. Install 2 fresh 'AA' alkaline batteries.

3. Replace the battery cover.

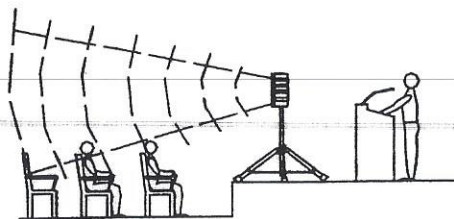Place batteries into slot and slide forward

Body-pack Transmitter:

1. Slide open battery cover on front of transmitter box.

2. Install 2 fresh 'AA' alkaline batteries.

3. Close the battery cover.

NOTE:
Transmitter power switch must be in the OFF position when changing batteries
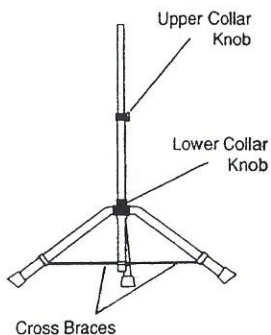
Setting Up The Liberty Sound System

For best results, it is recommended that the sound system be placed above the heads of the audience and above the height of the tallest obstruction using a speaker stand or table. This will benefit the listeners in the rear while minimizing the risk of overpowering the listeners in front.

Stand Setup

1. Loosen the Lower Collar Knob.
2. Separate the stand legs until the leg support cross braces are parallel to the floor.
3. Tighten the Lower Collar Knob.
4. Extend the center pole by loosening the Upper Collar Knob.
5. Adjust the height and retighten the Upper Collar Knob.
6. Place the Anchor sound system on the stand.

Upper Collar Knob

Lower Collar Knob

Cross Braces

Sound System Placement

The ideal placement of the sound system is between the crowd and the presenter, facing the crowd. This will give the audience a direct signal path and keep the person with the microphone behind the sound system, helping to prevent feedback from occurring.
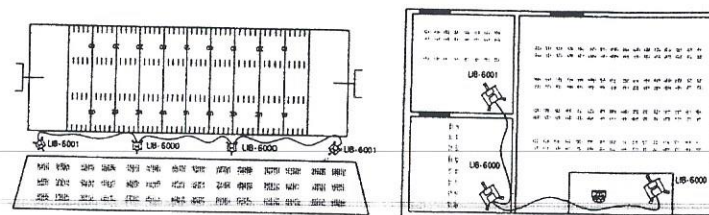
Single Unit Application

Place the unit along the aisle with the least amount of pedestrian traffic. Point the unit towards the center of the audience.

Two Unit Application

Place each unit along the aisles pointing just off the centerline of the audience. With the sound system placed properly over the head of the crowd, this should be sufficient coverage.
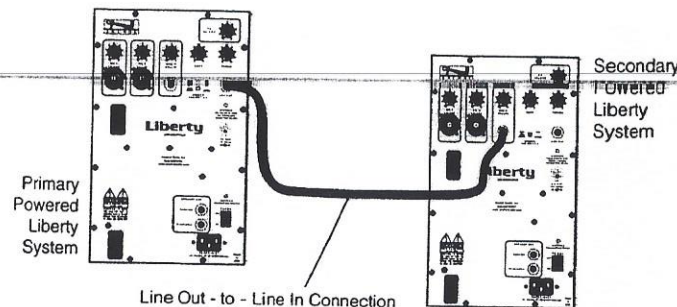
High School Football Stadium/Stands   Auditorium / Outdoor Assembly/City Hall

Sound System Connection

NOTE:
Auditoriums or outside areas with large exposed walls or patios may create multiple reflections of the original sound. Altering the sound system position will minimize the sound reflections.

There are two ways of connecting two or more Liberty sound systems together. The simplest method would be to use the speaker output of the primary unit and connect it to the unpowered companion speaker using an SC-50 speaker cable. No electric power is required for an unpowered companion speaker.

The second method would be to utilize the line-output feature. Simply connect a (EX-50PP) cable from the line-out of the primary Liberty to the line-in on the secondary powered Liberty. Set the volume of the second Liberty to maximum so that full volume control will be at the primary sound system.

Secondary Powered Liberty System

Primary Powered Liberty System

Line Out - to - Line In Connection

The line-out connection can also be used to send the signal to a sound system in a different room or a recording device.

Mic 1 and Mic 2

The balanced XLR, low impedance inputs are for use with balanced microphones to help prevent hum or interference when using long cables. They feature +12VDC condenser mic power for use with condenser-type microphones. The unbalanced 1/4", high impedance inputs are for use with unbalanced mics or other sources that do not require phantom power.

Line In

The unbalanced, high impedance, input is used for playback of a cassette or CD player, musical instrument, VCR, other sound system or similar line-level signal source. This input may be used in conjunction with other inputs for a composite output.

Line Out

The unbalanced Line-out provides a combined signal of all inputs being used. You can use this function to record your presentation or to "daisy chain" another powered sound system to the Liberty for greater crowd coverage. Note: This output is post source level; any volume fluctuations for a specific input will affect the output signal level at this output.
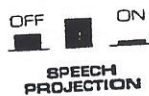
12 Volt DC Output

The DC output jack is used to power auxiliary equipment such as an outboard wireless receiver or Anchor Audio's Mini-Mix. It is rated at 12 volts DC, 800 milliamps maximum (output available at jack may be slightly lower depending on installed options).

DC OUT

Speech Projection

The Speech Projection switch allows you to customize the sound output of the Liberty for a particular application:

OFF   ON

SPEECH PROJECTION

Speech Projection off (button out): The Liberty provides flat, full-range frequency response for music or indoor voice applications.
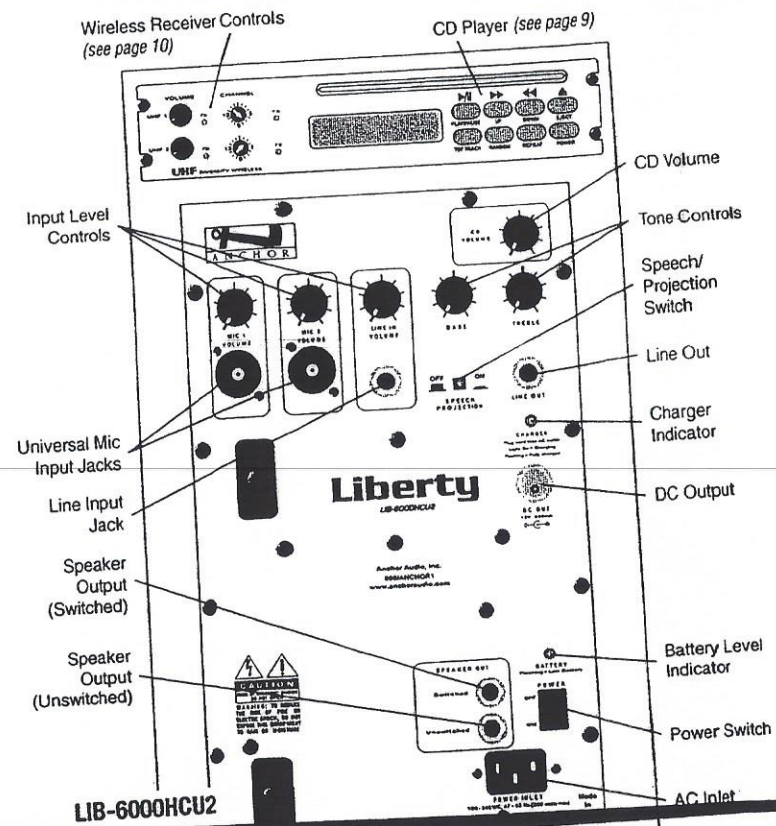
Speech Projection on (button in): Frequencies in the vocal range (800Hz-12kHz) are boosted for added clarity and efficient sound projection. Use this setting for outdoor functions, large crowds and speech applications.

Liberty Control Panel

NOTE:
Instructions for wireless operation can be found on pages 10 & 11.

1. Set all input level controls to minimum and tones controls to flat or middle position before turning on the power.

2. Plug a microphone into Mic 1 or Mic 2, or plug an audio source into the Line-in input jack.

3. Press POWER on. The red LED near the switch will light.

4. Slowly increase the level control adjacent to the input jack used to desired volume.

5. For speech applications, Speech Projection should be "on" to overcome ambient noise. For standard applications (music and indoors), Speech Projection should be "off".

6. Adjust Bass and Treble controls for desired sound quality.

Wireless Receiver Controls (see page 10)
CD Player (see page 9)
CD Volume
Input Level Controls
Tone Controls
Speech/ Projection Switch
Line Out
Charger Indicator
Universal Mic Input Jacks
Line Input Jack
DC Output
Speaker Output (Switched)
Battery Level Indicator
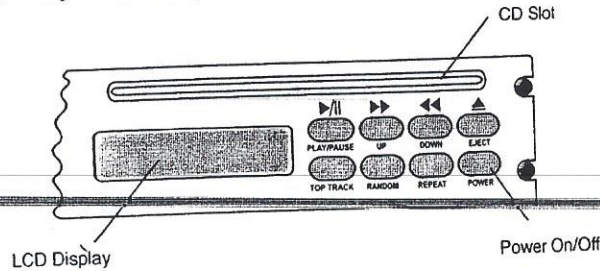Speaker Output (Unswitched)
Power Switch
AC Inlet

LIB-6000HCU2

The CD player features direct-in play power loading, anti-shock/skip CD mechanism, repeat & random play, three beam laser tracking system and dual one bit D/A converters. The audio signal is fed directly into the mixing bus, mixing it directly with all other inputs of the Liberty for a composite output.

CAUTION:
To avoid
noise at shut
off, turn CD
player off
before you
turn off the
Liberty.

CD Slot

LCD Display

Power On/Off

General Operation

INSERT CD - Push a disc into the CD slot label side up. The disc will automatically insert and begin to play.

POWER ON/OFF - Press POWER to turn the unit on and off.

EJECT CD - Press EJECT to eject the disc from the slot. If the disc has not been removed within 10 seconds, it will automatically be loaded into the slot again.

PLAY/PAUSE - Press to play a disc if one has been loaded. Press this button while disk is playing to pause play, press again to resume.

UP - Press UP once to advance disc to next track. Press and hold UP to fast forward on the current track.

DOWN - Press DOWN once to go to previous track. Press and hold DOWN to fast backward on current track.

TOP TRACK - Press TOP TRACK once to start playing the disc from the first track.

RANDOM - Press RDM to play all the tracks continuously in random order. Press RDM again to stop continuos random play.

REPEAT - Press this button to repeat the same track of the disc continuously. RPT will appear on the display, press again to stop it.

Caring For Built-in Batteries

It is very important that you fully charge the batteries in your system before first use and as soon as possible after each and every use, even if operated only briefly to preserve battery life.

When The Battery LED Flashes or Won't Light

BATTERY
Flashing = low battery

When the battery charge is low, the battery LED will begin to flash red. This indicates that you have 15-30 minutes before the battery protection circuit turns the unit off. If the battery is completely drained the battery light may not turn on at all.

AC Operation Mode

While in AC mode, the battery can be brought to a full charge during system use. When the battery reaches full charge, the Charger LED will show a steady flash.

Charging Batteries

CHARGER
Plug cord into AC outlet.
Light On = charging.
Flashing = fully charged.

Your system has a built-in automatic charger designed to properly charge and maintain the batteries. To charge batteries:

1. Plug the cord into an AC outlet. The Charger LED will light, indicating the batteries are being charged.

2. When fully charged (aprox 6-8 hrs), Charger LED will flash.

NOTE:
System can
be used while
charging.

When in AC mode the system automatically transfers power from the battery charger to the power amplifier at high volume output, causing the Charger LED to flicker.

Expected Battery Service Time

IMPORTANT:
Always store
your system
with batteries
fully charged.

Battery service time will vary depending on; volume level, tone control settings, type of usage and if a companion speaker is used. You can expect about 6-8 hours of operation at medium volume, 2-4 hours at full volume of continuous music input (usually longer for speech applications). To extend use plug in AC cord and continue.

Unit Storage

Always store your system with the batteries fully charged. Leave system plugged into an outlet during extended periods of storage. If this is not possible, charge the system at least once each month for a minimum of 24 hours.