BodySound On-line Manual

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FCC Compliance:

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION
IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY
NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST
ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT
MAY CAUSE UNDESIRED OPERATION.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.

3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the manufacturer or an experienced radio/TV technician for help.

Air Link Installation and Operation:

If the Air Link, Model ALNK-A01, wireless communication option was purchased it will be necessary to install the Air Link antenna on both the BodyLink receiver and BodySound amplifier before proper operation will occur.

Please review the BodyLink Receiver Overview and the BodySound Amplifier Overview for configuration of the Air Link transceiver.

CAUTION: Changes or modifications not expressly approved by BodySound Technologies, Inc. (BTI) could void the user's authority to operate the equipment.

Important Safety Instructions

1. Read these instructions.

2. Keep these instructions.

3. Heed all warnings.

4. Follow all instructions.

5. Do not use this apparatus near water.

6. Clean only with dry cloth.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Only use attachments/accessories specified by the manufacturer.

12. Unplug this apparatus during lightning storms or when unused for long periods of time.

13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

IMPORTANT SAFETY INSTRUCTIONS
(Furniture Addendum)

When using an electrical furnishing, basic precautions should always be followed, including the following:

Read all instructions before using the BodySound Chair.

DANGER- To reduce the risk of electric shock:
1. Always unplug this furnishing from the electrical outlet before cleaning.

WARNING- Risk of Injury- Keep children away from extended leg rest.

WARNING- Risk of Electric Shock-
 Connect this furnishing to a properly grounded outlet only.

WARNING- To reduce the risk of burns, fire, electric shock, or injury to persons:

1. Unplug this furnishing from the electrical outlet before putting on or taking off parts.
2. Close supervision is necessary when this furnishing is used by, or near children, invalids, or disabled persons.
3. Use this furnishing only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.
4. Never operate this furnishing if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the furnishing to a service center for examination and repair.
5. Keep the cord away from heated surfaces.
6. Never operate the furnishing with the air openings blocked. Keep the air openings free of lint, hair and the like.
7. Never drop or insert any object into any opening.
8. Do not use outdoors.
9. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
10. To disconnect the power cord, switch the main power switch to the off (0) position, and then unplug the cord from the electrical outlet.
11. This furniture is for use by persons only. Do not place other objects on this furniture.

SAVE THESE INSTRUCTIONS

Additional Manufacturer's Safety Instructions and Precautions

CAUTION: Changes or modifications not expressly approved by BodySound Technologies, Inc. (BTI) could void the user's authority to operate the equipment.

1. Read all instructions before using the Product and consult the on-line manual contained in the BodySound software and Control-Link controller, or for the BodySound Mini Link Controller consult the manual on the website www.BodySoundTheater.com.
2. Retain all instructions for future reference.
3. Heed All Warnings and labels - All warnings and precautions on the product and in the operating instructions and manuals should be adhered to.
4. Follow All Instructions. All operating and use instructions should be followed.
5. Use BTI Products only for their intended use.
6. Children should not use this product without adult supervision.
7. For child safety—destroy cartons, plastic bags, and any exterior wrapping material immediately after the Product is unpacked. Children should never use these items for play. Cartons covered with rugs, bedspreads, plastic sheets or stretch wrap may become airtight chambers and can quickly cause suffocation.
8. The maximum weight limit for a person using the BodySound Chair is 300lbs (137kg). Only one person should sit in a single chair, or in each modular section of a multiple seat arrangement.
9. Although your seating (Experiential™ seating or any other brand name seating containing BodySound technology, hereinafter referred to as "BodySound seating") products arrive as separate components, each component is heavy. To prevent accidental damage and/or injury, enlist help when unpacking, lifting, and moving it.
10. **For consumers with Pacemakers or purchaser's friends/guests that may have pacemakers: As with any product that produces a vibrating motion, it is possible that some pacemakers may interpret this motion as a false sense of movement and/or exercise. This may or may not affect the pacemaker in question. Consult your physician before use.**
11. Hearing Loss: Maintain the ambient sound level below 85 decibels (OSHA 3074) during usage to avoid hearing loss. The decibel readout (a number followed by "dB") that is displayed on the LCD is the decibel level setting for the BodySound Arm speakers (or external speakers if they are being driven by the BodySound amplifier). Excessive sound levels can also be produced from the head, spine or seat speakers based on the settings used even if the arm speaker dB level is set below 85.
12. Do not place BodySound seating, on anything other than the floor. It is designed to rest on a flat and level surface.
13. Power cord protection—power cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them.
14. If the power cord to your BodySound seating has become worn, have the cord checked by a service technician for possible replacement or simply replace it with a power cord of equal rating.
15. Disconnect electrical power to the BodySound amplifier before attempting to make or remove connections to it or before moving it.
16. Connect BodySound amplifier(s) to a properly rated, protected, and appropriately sized electrical circuit(s) to avoid electrical overload.

17. Avoid excess pressure on the speakers located on the chair back, head-rest, or in the arms of the chair.
18. Undo force—do not walk, step on, or jump on BodySound seating.
19. Do not sit or stand on the arms of BodySound seating.
20. Do not sit in BodySound seating with sharp objects in your pockets.
21. If the BodySound seating will not be used for an extended period of time, turn off the power switch on the amplifier under each seat, and disconnect the AC cord from the electrical outlet.

Electromagnetic Compatibility:

Electrostatic Discharge (ESD) interference may cause this equipment to malfunction or become unresponsive. In this event it may be necessary to power cycle the equipment.

This equipment may be susceptible to Electrical Fast Transients (EFT) noise conducted on the power line, specifically frequencies in the range 1.5 Mhz. to 4 MHz. In the event this causes problems it may be necessary to reset or power cycle the equipment.

Power Rating:

BodySound Chair Amplifier
100-240VAC, 50/60Hz, 500W

Special Precaution:

BodySound technology, incorporated into this Product, stimulates the physical senses of hearing and touch, which can intensify physical, emotional, mental, and psychological experiences. It can enhance and intensify physical and emotional feelings. Do not use this technology if you believe that feeling more physically and/or emotionally or intensifying your experiences can cause you harm or discomfort in any way.

BTI is not responsible for the type or content (music, movies, TV broadcast, games, etc.) you choose to use with BodySound technology and any effect that it may have on you or those that you let use this technology.

BodyLink Receiver Overview

The BodyLink receiver is an audio/video router providing connections between your entertainment equipment and your Experiential seating arrangement. It is best located with your entertainment equipment and can receive up to seven inputs, which include two HDMI, four Optical, and one Analog stereo input. The receiver's main function is to transmit audio signals, however depending upon the connections made, video content

may also pass through it (using the HDMI connections) en route to your TV or AV Surround Receiver.

Air Link Installation and Operation.

If the Air Link, Model ALNK-A01, wireless communication option was purchased it will be necessary to install the Air Link antenna on both the BodyLink receiver and BodySound amplifier before proper operation will occur.

Please review the BodyLink Receiver Overview and the BodySound Amplifier Overview for configuration of the Air Link transceiver.

NOTE: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To connect your BodyLink receiver to your entertainment equipment please read the section on [Connecting BodyLink receiver to Other Entertainment Equipment](). The BodyLink receiver can be operated using the selection buttons on the front panel or using either BodySound Controller through its RS485 connection (if wired) or using the wireless transceiver.

The left and right select buttons scroll through the seven input choices. As you scroll through the possible selections they will appear on the display followed by the signal mode for that input. If there is an active signal found for that input, the mode of the signal will be printed versus "No Audio" when no signal is found. The audio signal that is associated with the input selected is transmitted to the BodySound amplifier under the lead seat.

If you are using the wired Cat5 connection between the BodyLink receiver and the BodySound amplifier up to eight channels of audio signals can be transmitted. When you select HDMI 1 or 2 or Optical 1-4 and there is an active Analog signal present as well, the Analog signal will also be transmitted. The Analog signal will only be audible in the head speakers if you choose to add those signals in the Mixer/Fader for the head speakers. If you only wish to transmit the Analog signal then select Analog Only.

When using BodyLink's wireless transmission only a six channel Dolby 5.1 AC3 bit stream or a two channel stereo signal can be transmitted to the BodySound amplifier.

Connecting BodyLink Receiver to Lead Seat Amplifier

The BodyLink receiver can transmit audio signals to the BodySound amplifier under the lead seat in either a wired (requires cabling) or wireless format (provided that the wireless option was purchased). The wireless format can transmit either two channels of stereo or the six channel Dolby 5.1 AC3 stream. The wired format can transmit up to eight channels of audio.

Wired transmission is considered to be more reliable and a better means of transmission compared to wireless technology for real time audio applications. Applications such as watching TV or a movie, unlike downloading data over the Internet where buffering

occurs, require real time, uninterrupted transmission to avoid sound loss and break-up. For this reason and because wired transmission can convey eight channels of audio data, wiring the BodyLink receiver to the amplifier under the lead seat is generally recommended.

The audio cabling required in the wired format is shielded Cat5 cable. If the Cat5 cable is not properly shielded electrical or electromagnetic interference with the signal can occur, causing poor audio data transmission.

During installation of a wired system it is recommended that the BodyLink receiver also be connected (wired) directly to the amplifier under the lead seat using a serial cable. Serial cabling permits commands and non-audio data to be transferred between any BodySound amplifier in the properly cabled/connected chain and the BodyLink receiver.

Connecting BodyLink receiver to Other Entertainment Equipment

The BodyLink receiver connects your electronic entertainment equipment to the BodySound amplifiers in your seating configuration through the amplifier under the lead seat. Its main function is to transmit audio signals, however depending upon the connections made, video content may also pass through it (using the HDMI connections) en route to your TV or AV Surround Receiver.

The inputs to the BodyLink receiver include two HDMI inputs, four optical inputs, and an analog right and left stereo input. Audio signals can be transmitted using shielded Cat5 cable or a wireless transmitter. Commands and non-audio data can be transmitted between the BodySound amplifiers and the BodyLink receiver bi-directionally using RS485 and wireless connections. An HDMI output is present, typically used to transmit audio and video signals to your TV or to your AV Surround Receiver. The BodyLink receiver uses HDMI version 1.3 technology.

There are many ways to connect the BodyLink receiver to your existing equipment. Several common connection schemes will be presented, but there are many variations.

Variation 1: Your existing DVD player and Receiver are of the same HDMI version level (this is more likely if you purchased them at about the same time).

Assuming most if not all of your entertainment equipment is connected to your Receiver, then:

- Connect the HDMI output of your Receiver to the HDMI 1 input on the BodyLink receiver

- If your TV is presently connected to your Receiver using a connection other than HDMI or DVI and you are satisfied with the picture, skip this step. Otherwise, connect the HDMI output of the BodyLink receiver to the HDMI input of your TV. If your TV only has a DVI input you will need an HDMI to DVI adaptor cable to make this connection.

Making these connections will play whatever audio content you choose for your Receiver through the BodyLink receiver to your BodySound amplifiers in your seating arrangement. If you don't make any other connections to your BodyLink receiver you can always leave the BodyLink selection on HDMI 1 and all audio content will be transmitted to your seating arrangement.

Variation 2: Your existing DVD player is HDMI version 1.3 (can play BluRay DVDs) and your Receiver is at a lower HDMI version level (version 1.2 or below).

- Connect the HDMI output of your DVD player to the HDMI 1 input on the BodyLink receiver

- Connect the HDMI output of your AV Surround Receiver to the HDMI 2 input on the BodyLink receiver

- Connect the HDMI output of the BodyLink receiver to the HDMI input of your TV. If your TV only has a DVI input you will need an HDMI to DVI cable to make this connection.

- Connect the optical output of your DVD player to the optical input of your AV Surround Receiver labeled DVD player. This connection will allow you to play audio from the external room speakers connected to your AV Surround Receiver.

- Consider also connecting the right and left stereo outputs of your AV Surround Receiver to the right and left Analog inputs on the BodyLink receiver. See other considerations below.

When using these connections select HDMI 1 on the BodyLink receiver when watching movies or listening to music using your DVD player. Otherwise, select HDMI 2.

Variation 3: Your existing entertainment equipment does not have HDMI outputs.

- Connect the optical outputs of your equipment to optical inputs 1 through 4 of the BodyLink receiver.

- Connect the corresponding optical outputs of the BodyLink receiver to the appropriately labeled optical inputs of your AV Surround Receiver.

- Connect the right and left stereo outputs of your AV Surround Receiver to the right and left Analog inputs on the BodyLink receiver. See other considerations below.

These connections will only send and receive audio signals. Maintain your video connections as they are. On the BodyLink receiver select Optical 1, 2, 3, or 4 or Analog depending on which device you have connected to the respective optical inputs.

Other considerations:

If your CD player can play super audio CDs connect the analog stereo outputs of your CD player to the corresponding right and left stereo input on the BodyLink receiver.

When playing super audio CDs, select Analog on the BodyLink receiver to transmit this signal to your seating arrangement.

Variations 2 or 3 above will allow you to send audio signals from both DVD player or other devices and your AV Surround Receiver (through the Analog input) simultaneously to the lead BodySound amplifier. These signals can be mixed using the Mixer/Fader function for the head speakers.

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Operation

Seat Functions

Each seat contains recline and leg rest motors that are attached to the steel frame and can be operated independent of one another. Independent operation allows you to position yourself at the optimal level of recline with the most suitable degree of leg lift. When the back of the seat is in full recline and the leg rest is in the full up position, the seat can achieve a near-horizontal position. When it is most upright the seat assumes a position that is better suited for gaming or exiting the chair.

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Recline

The recline motor changes the angle of the seat back. You can operate the recline motor by either using the recline switch in the console of the arm, the recline buttons located on the bottom of the Control-Link screen or the recline buttons on the Mini-Link controller. For middle seats of couch arrangements you can operate the recline motor with a Control-Link connected to the console of an end seat, or a Mini-Link Controller connected directly to the Chair Amp below the seat, as you won't have any arm console switches available to you.

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Leg Rest

The leg rest motor raises and lowers the leg rest. You can operate the leg rest motor by either using the leg rest switch in the console of the arm or by using the leg rest buttons located on the bottom of the Control-Link screen or the leg rest buttons on the Mini-Link controller. For middle seats of couch arrangements you can operate the leg rest motor with a Control-Link connected to the console of an end seat, or a Mini-Link Controller connected directly to the Chair Amp below the seat, as you won't have any arm console switches available to you.

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Pressure Switch

Each seat contains a pressure switch located in the chair back. The pressure switch detects the presence of a user when the user is leaning against the back of the chair. When this switch is turned on it acts as an automatic mute/un-mute function. Sound will play only when you are leaning back in the seat. When you lean forward to get out of the seat, sound will stop. In the Settings Menu, you have the ability to disable this switch. When you turn the pressure switch off the automatic mute/un-mute function is turned off. If you want to hear sound when you are out of the seat, turn the pressure switch off.

BodySound Amplifier Overview

A BodySound amplifier should be positioned underneath each seat. The amplifier should rest upright on its feet at all times and should not be placed against the leg rest motor or any leather or fabric. **It should never be placed upside-down or used when placed upside-down**. The top of the amplifier enclosure is constructed as a drip shield in case any liquid is spilled in or on the seat. Despite this precautionary design, **never immerse the BodySound amplifier in liquid or cause any liquids to be put into or around the enclosure or amplifier. Do not open the enclosure as that can result in shock, personal harm, and void your warranty**.

The amplifier should be positioned so that the perforated box surrounding the heat sink faces forward under the seat. **Do not remove the perforated box around the heat sink. The fins and body of the heat sink can be very hot to the touch when the amplifier is in use. Do not touch any part of the heat sink, as prolonged contact can result in burns**. (See also Safety and Precautions)

Air Link Installation and Operation.

If the Air Link, Model ALNK-A01, wireless communication option was purchased it will be necessary to install the Air Link antenna on both the BodyLink receiver and BodySound amplifier before proper operation will occur.

Please review the BodyLink Receiver Overview and the BodySound Amplifier Overview for configuration of the Air Link transceiver.

NOTE: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Connections

The BodySound amplifier has the following connectors mounted on either the back panel or right side of the enclosure:

Back Panel	Right Side
AC power	Speakers (Back)
Chair IN & OUT	Seat Driver
Optical IN & OUT	Recline
Internal Control	Leg Rest
External Control	
USB port	
Left and Right Aux input	
External speaker connector	
Console Control	

Functions

Audio amplification:

The BodySound amplifier contains 3-two channel amplifiers and 1-bridged amplifier to power the seat driver. The 3-two channel amplifiers power 3 pairs of speakers (head, spine, and arm speakers). Since two channel amplifiers are used, each individual speaker within each pair of speakers can be volume adjusted independently (using percent volume settings for the spine speakers and balance settings for head and arm speakers).

Processing:

Depending upon the options purchased, there are a minimum of four digital signal processing chips (DSPs) in each BodySound amplifier. This provides a computational capacity of at least 200 million instructions per second. The DSPs are used to decode the Dolby 5.1 AC3 bit stream and are capable of decoding Dolby True HD. They are also used to perform Virtual Surround Sound, Automatic volume adjustments for the SoundNumber system, and EQ (equalizer) functions and to compute the generated low frequency array and its digital output for the BodyNumber functions.

Mixing:

The BodySound amplifier can receive up to 8 channels of audio signal data. Many of these audio channels can be sent to the speakers or seat driver in the proportion that you choose. Additionally, two created audio signals (associated with the generated low frequency array and massage function) can also be mixed with the primary audio channels for the spine speakers and seat driver.

Filtering:

Before the mixed audio signal is sent to the speakers or seat driver it is filtered based upon your filter settings. There are independent 9-band equalizer functions used for the head and arm speakers and independent 3-band filters used for each of the spine speakers and the seat driver.

Speakers

Each BodySound seat/chair contains four speakers in the seat/chair back, one driver under the seat, and can connect to two arm speakers. The specifications for the various speaker/driver types are as follows:

System Type	Low Frequency Driver	Mid Frequency Driver	High Frequency Driver	HF Driver Upgrade
Configuration	Direct Coupled Transducer	Acoustic Suspension	Acoustic Suspension	Acoustic Suspension
Size	8"	5.25"	2	2" with 3 pc 19mm array
Impedance Nominal	4Ω	8Ω	8Ω	8Ω
Crossover Type	Acoustic LF Bandpass	Acoustic MF Bandpass	Acoustic HF Bandpass	Acoustic HF Bandpass
Crossover Frequency	14Hz—75Hz	60Hz—8000Hz	110Hz	110Hz
Array Crossover				
Power RMS	250W	50W	25W	25W
Power peak	350W	75W	40W	40W
Sensitivity	Tactile	85 dB @ 2.83V @ 1m	80 dB @ 2.83V @ 1m	80 dB @ 2.83V @ 1m
Height, Width, Depth	8" x 4-1/4"	15" x 14.125" x 3.25"	5" x 5" x 6-5/8" x 3-3/4"	5" x 5" x 6-5/8" x 3-3/4"
Weight	8.6 lbs.	9.4 lbs.	1.9 lbs.	1.9 lbs.

Head Speakers

There are two head speakers (High Frequency Driver) in the head rest portion of the seat back. Each speaker is angled approximately thirty-degrees so that the sound waves move toward you.

Spine Speakers

Both spine speakers (Mid Frequency Driver) are contained in the same cabinet, although a divider within separates it into two independent chambers, one for each speaker.

Seat Speaker/Driver

The seat driver (Low Frequency Driver) will be referred to in this manual as a speaker or driver for the sake of familiarity. Technically, it is a driver as speakers typically consist of driver(s) contained within a cabinet or housing and the seat driver is not housed in a cabinet.

Arm Speakers

Two arm speakers can be connected to the BodySound amplifier. Each BodySound arm speaker is 8 ohms in resistance. If you connect the external speaker connections on the BodySound amplifier to other external speakers they must be 8 ohms to prevent damaging the amplifier.

The BodySound amplifier does not automatically recognize the presence or absence of arm or external speakers. If you have arm speakers or have connected external speakers to the BodySound amplifier, please make sure that the Arm Speakers button in the System Settings screen is set to Present. If this button is set to Absent, then the Arm Speaker buttons in the Speaker button array on the display will not be present and these speakers will not be active.

If your Experiential seating arrangements contains speakers in the arms, these must be connected to the amplifier's external speaker connector using the connectors provided.

Control Screen (BodySound Controller) Overview

The Control Screen (variously called Controller or Control Link) is your window into the world of BodySound technology. It allows you to control the seat functions (recline and

leg rest), all available audio functions, your other entertainment equipment since it can function as a universal remote control, and it can also provide connectivity to the Internet. The Controller is essentially a hand-held computer running BodySound software. It is equivalent to running BodySound software on your laptop. The one major difference is that the BodySound Controller or Control Link is capable of operating as a universal remote control, while your laptop is not.

In this section the words Controller, Control Link, Control Screen, or laptop can all be used interchangeably, unless stated otherwise. The Mini Link is a smaller, less versatile device used to control some of the same functions of the BodySound amplifier that are described in this section.

The Control Link contains a touch screen that can be used to access the functional screens of the device. Using your finger or the stylus you can select a field to modify by pressing directly on the screen. The non-numeric settings within some fields can be modified by repeatedly pressing on the button on the screen. For scrollable numeric fields, pressing on the button on the screen will highlight the field thus allowing you to use the up and down buttons on either side of the screen to scroll through the values.

Alternatively, on either side of the touch screen are navigation buttons forming a square pattern that surrounds a center button. In general you can use the left and right navigation buttons to highlight the various active buttons on the screen. The left and right navigation buttons allow you to move the active focus between fields. When you land on a scrollable field, the up and down buttons will allow you to scroll the range of values. Pressing the center button allows you to toggle settings of the selected function in non-scrollable fields just like pressing on the button on the screen directly.

Connections

The Controller connects to the BodySound amplifier by connecting the square USB port at the top of the device to the USB port in the console of the arm using a USB, B to B cable. Using your laptop will require a USB, A to B connector. The Controller must be connected in this way in order to communicate with the BodySound amplifier. The Controller can be disconnected from the USB cable and be battery powered for approximately four hours of use when fully charged. When used in this un-tethered manner it cannot communicate with the BodySound amplifier directly. However, it can still control your other entertainment equipment through its infra-red transceiver and also, still provide Internet connectivity (with a USB WiFi adaptor and the appropriate wireless infrastructure).

The Control Link must be connected to the USB port in the console of the arm in order to be recharged. It takes approximately 24 hours to fully charge a depleted battery. When plugged into the USB port and assuming all of the BodySound amplifiers in your configuration are connected together via serial cables (read the Connecting Seat Amplifier to Seat Amplifier section), the Controller can operate every seat amplifier. In this manner, one Controller can operate an entire seating configuration.

A stereo audio output port, located also on the top panel of the device, can be connected to the left and right auxiliary stereo input jacks in the console of the arm. Audio content

received from the Internet can be transmitted to the BodySound amplifier in this way. An additional rectangular USB port, on the top of the Controller, is available for software upgrades and for storage of Preset settings and other data, when connected to a USB memory device. This connection also provides Internet connectivity when you plug in a USB WiFi device provided you have a wireless router in your home properly connected to the Internet.

Chair Control

The Controller's screen displays Pictographs of the chair along the bottom of the display. These pictographs illustrate the direction that the chair back and/or leg rest will move when they are pressed. To activate these buttons either press and hold them directly or highlight one with the navigation buttons and press and hold the center select button. The chair part will move only when the button is pressed and held.

Universal Remote Control

The BodySound Controller can function as a Universal Remote control device to control your other entertainment equipment. Programming Universal Remote Function can be performed at the time of installation or any time thereafter. The **Remote Control Screens** are described in depth within this help function. Press the Remote button on the Main Menu or Play Mode Control screen to access the Universal Remote features.

Wireless Internet Access

The Controller can access the Internet provided you have a wireless router in close proximity to your Experiential seating configuration. You will need to plug an 802.11 wireless adapter into the USB port on the top of the Controller. Please check your wireless router to determine what level of wireless adapter it can communicate with (802.11g versus 802.11b or others).

Screen Descriptions

Main Menu

From this and any other screen, you can access help text by pressing the banner section of the screen (the top part of the screen with the text "Experiential™ seating with BodySound™ technology").

The oval buttons to adjust the BodyNumber setting and SoundNumber or Arm Volume setting are used by pressing on the upper part of the buttons (arrow up) to increase the settings or the lower part of the buttons (arrow down) to decrease the settings. The numeric settings are shown below the buttons. Alternatively, the oval buttons can be highlighted by using the navigation buttons to the left and right of the touch screen and then pressing the center select button. Then use the up and down aspect of the navigation buttons to adjust either setting.

The rightmost oval button (SoundNumber or Arm Volume button) that is labeled either "Arm Vol" or "♪#" is the master volume control button. It adjusts the volume of all speakers simultaneously. If the SoundNumber system is on, then the button is labeled "♪#" and automatic adjustments are made based upon your setting. If the button is labeled "Arm Vol" then no automatic adjustments are made.

The four rectangular buttons on the touch screen direct you to the main functions of the system.

The Play selection guides you through the process of running the system using a number of built-in checks and defaults. You can begin running the system in Play mode and then access the settings for the various functions. Don't hesitate to experiment because you can always restore the default settings of the Preset presently being used.

The Preset option allows you to run the BodySound technology from saved Presets. This is the fastest way to setup and operate your system in a customized manner provided you have created your own custom Presets. Alternatively, you can use the factory default Presets.

The Settings button allows you to perform the BodyLink receiver setup procedure, customize the system settings, and transfer settings to and from a USB memory device or the hard disk of your laptop if you are operating BodySound software on a laptop.

The Remote button allows you to program and use the Control Link as a universal remote control device. This selection is not present when using BodySound software on a laptop.

The last active button is the Seat # button. If you have more than one seat and they are connected to each other using the RS485 Internal connections, you have the ability to run each of the seat amplifiers that you are connected to. To do so, change the Seat number to the number of the chair amplifier that you wish to operate. Seats are typically numbered sequentially from the lead seat (see your Installation Guide). You can change the Seat # by pressing the Seat # button and selecting from a drop down list.

Icons

There are eight icons and pictographs that are always present and active on the Control Screen. Six of them are located along the bottom of the screen, which deal exclusively

with the recline and footrest motor controls and two are located in the upper corners of the main section of the screen just below the banner. These two are for accessing Internet Explorer (Control Link) or exiting the program (laptop) and muting/un-muting the sound.

The Control Link turns on whenever the screen is touched, a button is pressed, or the device is moved. The Control Link cannot turn the amplifier off. The amplifier remains on as long as it is receiving power and the power switch is turned on (green LED will be lit). However, the amplifier goes into quiet mode about five minutes after the amplifier is no longer receiving an audio signal. The fan in the amplifier(s) will continue to run during that five minute period to cool the amplifier.

The speaker icon in the upper right corner mutes the sound that your seat is producing. When that icon is pressed an off symbol appears over the speaker showing that the seat has been muted. To un-mute press that icon again or scroll the master volume oval button.

Pictographs

Pressing and holding the pictograph of the seat in an upright position in the lower left corner of the screen causes it to return to its neutral (upright and leg rest closed) position. Pressing and holding the pictograph of the seat in full recline in the lower right corner of the screen causes the chair to move into a fully reclined position. Pressing and holding any of the bottom four pictographs that move a discreet part of the seat cause that part of the seat to move in the direction indicated. While pressing a button, the aspect(s) of the seat will continue to move until the button is released or until the limit switch is triggered in the motor moving that part of the seat.

BodyLink Screen

The BodyLink Screen displays a top row of buttons corresponding to your home entertainment equipment that is connected to your BodyLink receiver. To populate this row, do the following:

1. first program the universal remote function of the Control Link (select Remote from the Main Menu) so that it can control each of the entertainment devices, and

2. second in the Settings Menu, select BodyLink Setup to add your entertainment devices to the screen by assigning their connections to the respective BodyLink inputs.

Below the top row of buttons is a bottom row of buttons corresponding to the BodyLink inputs on the back panel of the BodyLink receiver. Press the BodyLink input button corresponding to the entertainment device that you wish to receive the audio signal from.

Note: If there is an active Analog signal present and you do not select it, that signal will be transmitted to the lead seat amplifier together with the signal that you have selected provided there is a CAT5 (wired) connection between the BodyLink receiver and the lead seat amplifier. However, to play that Analog signal together with the other signal selected, the fader function found in the head speaker [Mixer](#) screen must be set to also play the Analog signals. If you have selected the Analog signal in the BodyLink Screen or directly on the BodyLink device using the buttons on the front panel, then only that signal will be transmitted from the BodyLink receiver to the amplifier.

Play Mode and Amp Input Screen

When Play is pressed from the Main Menu, the Control Link checks the BodySound amplifier to determine if it is receiving active audio signals. If a single input is found or if the Aux input is active, that input is selected automatically (the aux input overrides all other inputs unless you specifically select a different input using the Amp Input Screen), the system begins to play, and the screen changes to the [Play Mode Controls Screen](#).

If both the Optical and BodyLink amplifier inputs are active, the BodyLink input will be automatically selected. If you wish to select the Optical input you can do so by selecting Amp Input from the Play Mode Control Link and then select Optical. The active inputs on the Amp Input screen will be highlighted by a speaker icon placed over the respective button. The input colored green is the one that is presently being used.

There is only one button for BodyLink input even though there can be a wired and/or wireless connection. To switch between AirLink and the CAT5 input if you have AirLink and also have a CAT5 cable connection, turn the AirLink on or off in the Settings menu.

If you have been using either the Optical or BodyLink input and you plug a device into the Aux input in the Console of the arm or directly into the BodySound amplifier, the amplifier Input will automatically switch to Aux for just the seat that the device has been plugged into. This signal will not be available to the downstream seats. When you unplug the Aux input, while your amp is receiving an active audio input from the BodyLink or Optical connection, that audio source will begin to play ten seconds after you have unplugged the Aux connection or turned off the device connected to it.

If no active amplifier Inputs are detected when you press the Play button from the Main Menu you will receive a message that no active Inputs are found. Press the Troubleshoot button below the message to view Troubleshooting tips or press Continue to move to the Play Mode Control Screen.

Settings Menu

There are three active buttons, BodyLink Setup, Systems settings, and Transfer settings buttons to choose from. The BodyLink Setup should be performed during installation. It provides the Control Link with information about the connections between your home entertainment equipment and the BodyLink receiver.

The System settings button allows you to customize a number of System settings, some of which also should be set at the time of installation.

The Transfer settings button allows you to transfer the settings files (Universal Remote settings, Presets, and Massage templates) to or from the seat amplifier you are communicating and a USB memory stick. If you are using a laptop, the Transfer settings button allows you to transfer the Presets and Massage templates to or from the seat amplifier you are communicating and the laptop's hard disk.

BodyLink Setup

This procedure should be performed after connecting the BodyLink receiver to your other entertainment equipment components. Performing this procedure will allow the Control Link to display which devices are connected to which inputs of your BodyLink receiver when viewing the Control Link during normal operation.

From the BodyLink Setup screen you can Add or Clear BodyLink input connections and Change the descriptors used for up to seven entertainment devices. Please use the following steps:

To add a connection:

a. Press the Add Connection button.
b. Press the entertainment device of interest from the list box that appears. (NOTE: This list is generated from the devices that have been added in the Remote Select Menu. If you do not add devices in the Remote Select Menu there will not be any devices to select from in the BodyLink Setup procedure. Even if you are running the BodySound software on your laptop and you cannot operate your laptop as a universal remote controller, you must first add devices in the Remote Select menu.)
c. Press the BodyLink input button that the device is connected to from the list box that appears.
d. Repeat steps a. thru c. until all (or up to seven) devices connected to the BodyLink receiver are accounted for.

System Settings

The System settings are general settings that are not Preset specific. In other words, they are not stored with your Presets. When these settings are changed they take effect immediately and are automatically saved for future use.

The Total Seats display button shows how many seats are linked together.

The Seat Id # display button shows the seat's unique identifier number. Seats should be numbered sequentially beginning with the lead seat. The Seat Numbers procedure should be performed during installation and must be done in order for the Control Link to communicate amongst different seats.

The BodyLink button setting tells the Control Link whether or not a BodyLink receiver is part of the system.

The AirLink button allows you turn AirLink reception in the BodySound amplifier ON and OFF.

The Arm Speaker button setting tells the amp whether or not it is connected to Arm Speakers or to external speakers. If your amplifier is connected to Arm or external Speakers then turn this button On so that Arm Speaker buttons will be displayed on the Control Link allowing you to access functions pertinent to those speakers and for sound to emanate from these speakers. If this setting is set to Absent, even if you have Arm or external speakers connected, there will be no sound from these speakers.

The Pressure Switch refers to a sensor in the chair back that signals to the amplifier that someone is in the chair when it senses pressure against the back of the chair. You can turn this switch On or Off by pressing the Pressure Switch button in the settings menu. When the Pressure Switch is turned On, the amplifier will activate automatically when it senses your presence, however you must be leaning back in the chair to activate the pressure switch. When the Switch is turned On sound will stop when you lean forward and deactivate the Switch. If this button displays "Off", sound will be produced from the speakers whether or not anyone is seated in the chair.

If the seat has not been occupied for 4 or more hours (with the seat switch set to ON), the volume setting will automatically be set to 54 dB (if the Sound# system is ON) or set to a volume of 10 if the Sound# setting if OFF.

The "Sound off in" display button refers to how quickly the amplifier mutes the sound once pressure is removed from the pressure sensor providing the Pressure Switch is turned On. Use the Up or Down buttons to make adjustments to this setting. If this setting is too low you may experience an intermittent sound signal or static or white noise sounds whenever pressure is quickly and repeatedly applied and removed from the Switch.

If you wish to use your Experiential seating, without sound, then either turn off the audio source equipment providing the audio signal or mute the seat. The amplifier will turn itself off when it hasn't received an active signal for about 5 minutes.

Transfer Settings

Preset files, Universal Remote files, and Massage Template files can be transferred to and from a USB memory stick using a Control Link controller. Most of these files reside in each BodySound amplifier. To ensure that you are transferring the correct files to the USB memory stick inserted into the Control Link, make sure you have selected the correct Seat number. Remember that any Control Link can operate and connect to any seat as long as the RS485 connections are in place.

Make sure that you first select the intended source or destination Seat # at the top of the screen. Press the button associated with the type of file you wish to transfer (Universal Remote settings, Presets Settings, and Massage Settings) in the correct column so that you transfer the files either to or from a USB memory stick. If you are using BodySound software on a laptop the files (other than the Universal Remote files) will be saved or retrieved from the hard disk.

Play Mode Controls (PMC)

The Play Mode Controls screen or PMC screen provides access to the seat and audio functions. The familiar Icons and Pictographs are present as well as the Arm Volume or SoundNumber oval button and the BodyNumber oval button. Central within this screen is the Speaker button array, which provides access to the various functions associated with the different speakers. Pressing any of the Head, Spine, Seat, or Arm speaker buttons will take you to the specific screens that will allow you to change settings specific to those speaker types.

The Remote button takes you to the Remote Select Menu so that you can program (select) a "New" device, "Edit" the buttons on a previously programmed device screen, or access and use previously programmed device control screens.

The Preset button will take you to the Preset Screen, allowing you to select a Preset, or Rename, Delete, or Save a Preset. If you have been operating your seat in Play Mode and you have changed various default settings that you wish to save, please save the settings as a Preset for future use and Rename that Preset for easy reference.

Pressing the BodyLink button takes you to the BodyLink Screen so that you can select a BodyLink receiver input setting or access the universal remote control functions for your entertainment devices when using the Control Link.

The Amp Input button will take you to the Amp Input Screen, allowing you to select a different input signal (Aux, BodyLink, or Optical).

The Diagnostic button takes you to the Diagnostics Menu, used primarily for troubleshooting.

The Seat # button has been previously described in the Main Menu section. The Back button at the top right of the screen will return you to the Main Menu screen.

Pressing any of the Head, Spine, Seat, or Arm Speaker icons will take you to the respective Speaker Controls screen where you can access all of the specific functionality for each type of speaker. The various functions are discussed below.

In each of the speaker specific screens there is also a Restore Defaults button on the left side just below the Internet Explorer button (Control Link) or exit button (laptop). Pressing this button will restore the settings associated with the Preset your are using.

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Speaker Volume and SoundNumber

Pressing any of the Head, Spine, Seat, or Arm Speaker icons will take you to the respective (Head, Spine, Seat, and Arm) Speaker Controls screen where you can access all of the specific functionality for each type of speaker. You can adjust the volume level across all speakers manually (using the oval Arm master Volume button) or automatically using the SoundNumber system. Settings are also available to allow you to regulate exactly how much sound you produce with each speaker. From the four Speaker Control screens you can also select the buttons on the left side of the screen to access other functions specific to each speaker type.

The SoundNumber system is an integral component to personalizing your sound space. Volume control has never been so sophisticated, yet so simple to use. You will no longer have to increase or decrease the volume setting whenever the commercials become too loud or the movie soundtrack too low. BodySound technology will do it for you—automatically! You can now customize your sound level by simply setting it with your Controller and the system will regulate it for you.

The status of the SoundNumber (SN) System On/Off button (when SN is On the button will show On and when SN is Off the button will show Off) determines whether you are using the automatic SoundNumber system or using the oval button to regulate system volume in a manual mode (the oval button will be labeled Arm Vol). Pressing the SoundNumber System On/Off button will toggle the SN system On or Off and change the label on the oval button.

When the SoundNumber system is On, the oval button will be labeled with the musical note (international symbol for sound) followed by the number sign (♪#) versus labeled "Arm Vol", when it is Off. Regardless of whether the oval button regulating sound level is labeled "Arm Vol" or "♪#" it works as a master volume control for all the speakers. The difference is whether or not volume adjustments are continuously made automatically by the amplifier to achieve a user-defined volume (decibel) level. When using the ♪# system you are providing the amplifier with your sound level setting in decibels so that it can regulate the volume level within a certain range, automatically.

When the SoundNumber system is On, automatic volume adjustments are continuously made based upon the decibel setting (the number shown under the oval "♪#" button) you have set for the arm speakers (range 45 to 85 db - decibels). When the sound level is too high, the BodySound amplifier will automatically adjust the volume downward and when it is too low it will automatically adjust it upward. When the SoundNumber system

is Off, the number shown under the oval "Arm Vol" button reveals the static volume setting for the arm speaker (range 0 to 100). When using the oval button when it is labeled "Arm Vol", no automatic volume adjustments are made—you must make them.

Pressing the oval button will adjust the SoundNumber or Arm Vol setting up or down depending upon which end of the button you press. If you highlight the oval button using the navigation buttons, you can then use the up and down buttons to change the SoundNumber or Arm Volume setting up or down.

The Reaction Time button underneath the oval ♪# button can be changed between TV, Movie, and Music. These modes reflect the speed with which automatic adjustments are made. When Reaction Time is set to TV the adjustments will be the fastest (to decrease the volume of commercials mainly) and when it is set to Music the adjustments will be the slowest to minimally influence the artist's intentions.

The ♪# or Arm Vol button operates as a master volume controller as the setting for the Arm speakers is related to the other speakers as shown by the percentages in the center section of the screen. Although each speaker has a different (independent) volume setting there will be no automatic volume adjustments as long as the SoundNumber system is turned Off, only when it is turned On.

The oval button affect the arm speaker settings directly and the spine, seat, and either the head speakers indirectly. Therefore, it is important to note that if you wish to change only the volume of the spine, seat, or head speakers, you must adjust the percentages in the center section on the screen. For instance if you wish to decrease the lower spine speaker volume, then lower the percentage for that speaker only.

If the seat has not been occupied for 4 or more hours (with the seat switch set to ON), the volume setting will automatically be set to 54 dB (if the Sound# system is ON) or set to a volume of 10 if the Sound# setting if OFF.

The volume setting and the status of the SoundNumber system (On or Off) is not saved as part of any Preset. The Reaction Time setting and the percentage volume settings for each of the other speaker types is saved as part of a Preset. Changing the these settings will take effect in the Preset you are using. To save these settings for future use, you must select a non-factory default Preset from the PMC or Main Menu screen and save these changes.

Speaker Balance and Virtual Surround Sound

Independent Balance settings are available for the Head and Arm speakers. A Balance setting is not available for the pair of Spine speakers and instead each of the Spine speakers has a separate percentage of ♪# or Arm Volume control. The balance function would be redundant.

From the respective Head or Arm Speaker Control screen, press the Bal/VSS button. Press directly on the Balance scale and then slide the balance marker on the screen or

use the left or right buttons to position the balance marker in the desired location. When using the balance function you are effectively adjusting the volume for each speaker in the pair (reducing volume from one and correspondingly increasing the volume of the other).

Changing the Balance settings will take effect in the Preset you are using. To save these settings for future use, you must select a non-factory default Preset from the PMC or Main Menu screen and save these changes.

Virtual Surround Sound

Virtual Surround Sound or VSS is the virtual creation of surround sound using the audio data supplied to the head, arm, or both speakers. You can access this function by pressing the Bal/VSS button in the Head or Arm Speaker Control Screens. You can turn the VSS function on or off for either or both the head and arm speakers by pressing the Virtual Surround Sound status button until it displays the desired setting. The choices are Head, Arm, Both, or Off.

There are various room types simulated with Dolby's virtual speaker (VSS). Pressing the button next to Room Type allows you to select different room types including a selection specifically for headphones (standard room, wide room, and headphone).

Note: When using VSS, the Mixer function for that speaker type (Head or Arm) will not be an available option as all of the signal content will be specified by the VSS function.

Changing the VSS settings will take effect in the Preset you are using. To save these settings for future use, you must select a non-factory default Preset from the PMC or Main Menu screen and save these changes.

Speaker Mixer

The Mixer is used to assign the discreet channels of the audio input signals of a given Mode to the speaker outputs. When in stereo mode you can either select stereo to assign the left and right channels into their respective speaker or select mono to assign an equal mix of the right and left channels into each speaker. In 5.1 mode you can select from the center, front, surround, and subwoofer channels. From the respective Head, Spine, Seat, or Arm Speaker Control screen, press the Mixer button to access this speaker specific function.

For the head speakers, in regards to front and surround channels, you can only assign the appropriate lateralized signals. For instance you cannot assign R front or R surround to the L head speaker, nor can you assign the subwoofer channel to either head speaker. For the spine and arm speakers these restrictions do not apply as the spine speakers are not lateralized and for the arm speakers, mixing from both sides may be desirable. All six channels can also be assigned to the seat driver, although the output to the seat driver is always Mono.

Note: When an active Analog input is received by the BodyLink receiver, that signal is always sent to the lead seat amplifier in addition to any other input signal that has been selected.

If both a stereo signal (inputted through the BodyLink Analog input) and a Dolby 5.1 audio signal are received by the BodySound amplifier, then all eight input channels will be active in the in the Head Mixer. The Fader slider allows you to set the relative contribution of sound between the BodyLink Analog and 5.1 inputs so that they will both play at the relative volume (in the head speakers only) you have set using the vertical slider. Only the 5.1 signal will play through the other speakers.

If a stereo signal has been selected that is routed through one of the BodyLink inputs (other than Analog) and another stereo signal is also being inputted into the BodyLink Analog inputs then both stereo signals will be sent to the lead BodySound amplifier. The Fader slider, just as in the 5.1/Stereo scenario, will allow you to set the relative contribution of sound between the Analog and Stereo inputs so that they will both play at the relative volume for the head speakers that you set. Only the non-Analog input will play through the other speakers.

Once you have made any changes in Play mode, you can save these settings as one of the non-factory default Presets, so that the Mixer will be set properly when you use the saved Preset in the future.

To operate the Mixer, highlight a button in one of the speaker columns, by using the right and left navigation buttons or by pressing on it directly. Then use the up and down buttons to adjust the value up or down. The value selected represents the amount of volume allowable (from 0 to 100) for that particular channel.

Changing the Mixer settings, including the Fader settings, will take effect in the Preset you are using. To save these settings for future use, you must select a non-factory default Preset from the PMC or Main Menu screen and save these changes.

Speaker EQ (Equalizer)

The Equalizer (EQ) function allows you to filter the mixed audio signal before it is outputted by the speakers. This function can be independently applied to the audio signals sent to each of the Head, Spine, and Arm speakers and the seat driver. The equalizer function uses nine independently controlled bands for the head and arm speakers and three bands for the seat and spine.

Note: If you are adjusting the EQ filter to create more bass for the purpose of feeling more, first make sure that the percent volume settings for the spine speakers and seat driver is set high enough. Also check the Mixer settings for the seat and spine speakers to determine that all of the content you wish to send to those speakers is actually being sent. Increasing the spine and seat driver percent volume, provided the correct content is mixed into those signals, will create more vibration than simply increasing the low frequency content of the sound.

To access the EQ function to filter the amplifier output, press the EQ button from the respective Head, Spine, Seat, or Arm Speaker Control screens. Then select the particular speaker of interest (Both, Left or Right, or Upper or Lower depending upon speaker type). If you select Both, the changes you make will be applied to both speakers of the pair. Then highlight the particular frequency band of interest. Once you have the bar of interest highlighted use the Up and Down buttons to make your adjustments.

Changing the EQ settings will take effect in the Preset you are using. To save these settings for future use, you must select a non-factory default Preset from the PMC or Main Menu screen and save these changes.

BodyNumber System

BodySound technology enlivens your seat with more feeling without forcing you to turn up the volume. Other technologies only transfer low frequency sound energy into the seat, which allows you to feel certain parts of the soundtrack, typically explosions or crashes. Only BodySound technology can translate all of the sound frequencies found in the soundtrack (low, mid, & high) into a language (Generated Low Frequency Content—GLFC) that your body can feel. With the BodyNumber system you can turn everything you hear into a feeling experience, not just explosions.

The BodyNumber setting (range 0 to 100) is used to specify the magnitude of the GLFC that can be played through the speakers. The number below the oval BodyNumber button shows the setting. The BodyNumber setting must be above "0" in order for this function to be turned on. The higher the setting, the more you will feel as a result. The content of what you are hearing from the head and arm speakers will remain unchanged since the Generated Low Frequency Content cannot be mixed with the Head and Arm speaker signal content. You can adjust the BodyNumber setting by pressing the up or down sections of the oval button or by highlighting the BodyNumber button with the right and left navigation buttons and then using the Up and Down buttons.

To access the BodyNumber System screen, press the Body # button from the Spine or Seat Speaker Control Screen. This screen will allow you to modify how the GLFC is created, by changing the input frequency range, the magnitude of the output frequencies (GLFC), and the audio signal that is used as the source data, and also allow you to assign from which speakers the GLFC is played.

The Input Range of frequencies (low and high numbers to the left and right of "Input Range") can be changed to create output frequencies from a specified range. In this way, frequencies that you can feel can only be created when inputted frequencies in that specific range are present. The Output Range of frequencies (GLFC) can be modified by manipulating the data associated with the corresponding segments (same color) of the input frequency row.

To change the magnitude of specific output frequencies, highlight the segment of interest. Then using the up/down buttons, increase or decrease the number of bars over

the segment, which in turn increases or decreases the corresponding output frequencies.

To change the input frequency range for a specific output frequency, press the center button when one of the segments is highlighted. A "J" will appear in the highlighted segment. Using the left/right buttons you can join adjacent segments. Pressing the center button again will produce a "U" in the box. Using the left/right buttons you can un-join adjacent segments.

The Driver button, just under the Seat # button, allows you to change the audio signal that is used as the source data. You can select either Arm or Head signals.

You can also specify the Mixer output for the GLFC with the three buttons (Spine-Upper, Spine-Lower, and Seat) toward the bottom of the screen. Turning these buttons "On" or "Off" will either send the GLFC to the representative speaker or not.

Changing the BodyNumber settings will take effect in the Preset you are using. To save these settings for future use, you must select a non-factory default Preset from the PMC or Main Menu screen and save these changes.

Massage

Pressing the Massage button from the Spine or Seat Speaker Control screens will take you to the Massage Preset Control screen. You can select from 6 massage Presets (3 static and 3 modulation), Delete, Edit, or Rename the Presets, and stop the Massage function if it is on.

You can edit a Static massage preset by pressing the Edit button followed by one of the top 3 massage Preset buttons. The Edit Static Massage screen will be displayed. There are two massage generators (signal generators) that can be turned On or Off. Each can have its own wave shape (sine or triangle), static frequency (25Hz to 50Hz), and static amplitude (0% to 100%). If you wish to save any changed settings in the Preset you are editing, press the Save button before leaving this screen. For each massage generator you can also determine the mix level for each of the upper and lower spine speakers and the seat driver. The mix levels are not saved in any of the Massage Presets, but instead are applied to all of them.

You can edit a Modulation massage preset by pressing the Edit button followed by one of the bottom 3 massage Preset buttons. The Edit Modulation Massage screen will be displayed. There is only one massage generator (signal generator), but it can be programmed in terms of modulating frequency (min to max), amplitude (min to max), cycle times, and ramp shape (sine, triangle, square, saw-tooth up, saw-tooth down, and random). The wave shape is either sine or triangle. If you wish to save any changed settings in the Preset you are editing, press the Save button before leaving this screen. You can also determine the mix level for each of the upper and lower spine speakers and the seat driver. The mix levels are not saved in any of the Massage Presets, but instead are applied to all of them.

Presets

The Presets screen allows you to Select, Rename, Save, and Delete Presets. Presets are stored in non-volatile memory in the BodySound amplifier and not in the Control Link, Mini Link, or laptop.

If you started in Play mode and have changed a number of settings that you wish to save for future use, press Presets in the Play Mode Controls screen (PMC Screen). When saving a non-factory default Preset for the first time, please give it a unique name so that you can recognize it in the future.

If you have previously saved Presets and you wish to select one at the outset, press Presets from the Main Menu. If you have been operating one Preset and you wish to select another, you can do so at any time from the Main Menu or PMC Screen.

You can have up to 18 presets—three in each of six categories (Movies, TV, Music, Sports, Games, and Headphone) in each amplifier. The first preset in each category is a factory Default, which cannot be altered. The second preset is dedicated to the seat amplifier identified by the current Seat number (upper part of the screen). It is called the Local preset. The third preset in each category, labeled Global, is generally used to save and restore the same preset to all connected seats. Regardless, the Global preset can be used by the local user to save specific settings, however, global presets can be over-written by anyone who saves a preset to all seats, by placing a check in the All Seats check box and saving the preset in the Global column.

To select a Preset for use, simply press the Preset you wish to use. If you want to select a Preset for all connected seats make sure there is a check in the box for All Seats. If you have a check in the All Seats box and you select a Local preset, then the Local Preset defined for each seat (for that row or category) will be selected, as long as one is defined. If one is not defined, then the current settings for that seat will not change.

To save a Preset for all seats, place a check in the All Seats check box, press Save and then press the button corresponding to the category you wish to save it to. When saving a Preset to all seats, you should use the Global column. If you select the Local column when the All Seats box is checked, the Preset will only be saved to the amplifier specified by the seat number setting. The Local Preset associated with a different seat number cannot be modified when someone saves a Preset globally—it cannot be over-written—even if they choose to save the Preset in the Local column, as long as the Seat number identified is not set for that seat.

Diagnostics Menu

Pressing the Diagnostic button in the PMC Menu takes you to the Diagnostic Menu. From this menu you can Test Inputs, Test Outputs, and perform several other functions including updating software.

Test Inputs will allow you to see what the active inputs to the BodySound amplifier are and to check the Mode of that audio signal. Test Inputs can also be used to determine the inputs to the BodyLink Receiver.

Test Outputs will allow you to test the function of each of the speakers independently.

Test Inputs Menu

Pressing the Test Inputs button from the Diagnostic Menu will take you to the Test Inputs screen, which will allow you to determine signal input information for the BodySound amplifier and BodyLink receiver.

Pressing the Amp Inputs button will take you to the same Amp Input Screen that is used in Play Mode (when you select Play from the Main Menu) with an added feature that displays the mode of the audio signal (PCM or AC3) in addition to the selected input and active inputs. On this screen you can change the Seat number of interest so that you can check this information for each of the BodySound amplifiers that you are connected to.

Pressing the BodyLink button will take you to the same BodyLink Screen that is used in Play Mode. This screen will show you the input selected for the BodyLink receiver.

Also on this screen is the BodyLink Analog Gain button, which allows you to increase the gain (.5, 1x, 2x, 4x, and 8x) of the Analog signal, which you'll want to do if the Line Level Input Voltage of the Analog signal is less than 25% of full scale.

Test Outputs

Pressing the Outputs button from the Diagnostic Menu will allow you to test each of the speakers independently from any seat amplifier that you are connected to. Select a speaker and a 500 Hz tone will play from the head and arms speakers. For the seat speaker a 30 Hz tone will play and for the spine speakers a 100 Hz tone is used. Listen to that speaker to ensure that it is working properly.

Mini Link

The Mini Link device is a small, less comprehensive Controller that allows you to operate the seat functions (recline and leg rest) and change some of the amplifier settings. It operates only the amplifier of the seat that it is connected to. The cable that is attached to the device can be plugged into the USB connector in the console of the arm or directly into the amplifier's USB connector.

The Mini Link cannot operate when it is disconnected. It also cannot operate as a Universal Remote Control and it cannot access the Internet. When the Mini Link is connected via its USB cable it can be activated by pressing any button. The small LCD screen will light and "Mini Link" will scroll across the display. It is ready to operate at then end of the scrolling message.

Mini Link – Button Functions

Pr/2nd button (upper left round button) – Sequential presses and releases of this button cycles through the presets saved in the amplifier's non-volatile memory for only the seat amplifier that the Mini-Link is connected to. The first press and release of the Pr/2nd button will display the currently used Preset. The Preset will not be changed until the button presses result in a different Preset being displayed. The last Preset displayed is selected. If the Pr/2nd button is held down for > 2 seconds the display reads "2nd", then a different button (that has a secondary function) can be pressed to engage the second function for that button. The Pr/2nd button must be held down when the second button is pressed in order to engage the secondary function. If the Pr/2nd button is released before a second button is pressed the display is cleared and the second function is no longer active.

♪# button (upper middle round button) – toggles the automatic SoundNumber system ON or OFF. When Sound# is ON the blue LED is lit and the LCD displays "ON" for 1 second. When the Sound# is OFF the blue LED is un-lit and the LCD displays "OFF" for 1 second.

Mute button (upper right round button) – mutes the sound from all speakers. The LCD displays "Mute" and all of the button LEDs stay lit, when mute is on. Pressing the Mute button or the Vol button up or down when Mute is ON turns Mute off. Don't leave the Mute button engaged for prolonged periods of time as that will shorten the life of the button LEDs.

Body# button (left oval button below the Pr/2nd and ♪# buttons) – upper portion increases and lower portion decreases the Body# setting. The Body# setting (0 to 99) is displayed on the LCD.

Sound#/Vol (speaker) button (right oval button below the ♪# and mute buttons) – upper portion increases and lower portion decreases the Sound# (♪# ON) or Volume setting (♪# OFF). The LCD displays the numeric setting from 0 to 99 followed by "dB" when ♪# is ON or displays only the numeric setting from 0 to 99 when ♪# is OFF.

Recline Button (lower left oval below the Body# oval button) – the upper part of the button moves the reclined back more upright and the lower portion of the button moves the chair back into a more reclined position.

Leg Rest Button (lower right oval below the Sound#/Vol oval button) – the upper part of the button closes the leg rest and the lower portion of the button opens the leg rest.

Sit Up button (round button adjacent to upper parts of oval recline and leg rest buttons) – raises the back of the chair and closes the leg rest.

Relax button (round button adjacent to lower parts of oval recline and leg rest buttons) – reclines the back of the chair and opens the leg rest.

Mini Link Second button functions (these functions are operable when 2nd is displayed on the screen)

2nd + Mute button – toggles the pressure switch setting between ON and OFF. The LCD displays "ON" or "OFF" for 1 second.

2nd + Body# button (up or down portion of the oval button) – Switches the BodyLink selection by incrementing it (moving the selection to the right) when "+" is pressed or decrementing it (moving the selection to the left) when "-" is pressed. If the BodyLink receiver is off, performing either of these actions will turn it on. To turn the BodyLink receiver off, press and hold the Pr/2nd button and press and hold the "-" portion of the Body# button down for 3 seconds.

2nd + oval speaker button – Increases or decreases the percent volume of the head speakers.

2nd + oval leg rest button – Increases or decreases the percent volume of the seat speaker.

2nd + oval recline button – Increases or decreases the percent volume of both spine (back) speakers.

2nd + ♪# button – Toggles between the arm balance (ABAL) setting and head balance (HBAL) setting. With ABAL or HBAL displayed (while still holding down the Pr/2nd button after releasing the ♪# button) press the top of the Vol (speaker) button to adjust balance to the right and the bottom of the Vol (speaker) button to adjust balance to the left for either set of speakers. The balance settings are independent of and will persist after Preset changes.

2nd + Relax button – Turns Massage ON and OFF. The LCD displays "ON" or "OFF" for 1 second.

2nd + Sit Up button – Pressing and releasing the Sit Up button while holding down the Pr/2nd button switches between the saved Massage templates that reside in the non-volatile memory of the amplifier. The first press and release only displays the current/last template used. The LCD displays "S1", "S2", "S3", "M 1", "M 2", or "M3" representing the saved static and modulation templates. The LCD displays "OFF" if Massage isn't turned ON.

If you press the Pr/2nd button and then press and release the Mute button before 2nd is displayed on the screen, you can access a menu of options. To keep this menu open

hold down the Pr/2nd button, but not the mute button. To advance between the selections, press the ♩# button. To execute the options use the oval speaker button (+ or -). Within this menu you can adjust the angle and brightness of the display, read the version number, and perform a soft reboot of the amplifier.

Remote Menu

The Control Link can act as a universal remote control provided it is programmed to control your entertainment devices. Communication occurs through infra-red (IR) transmitters placed in the upper back region of the Control Link. Since IR communication requires line-of-sight, you must point the Control Link at or above the target entertainment device. The BodySound PC software and the Mini Link do not have universal remote functions.

The Remote Select Menu can be accessed by pressing the Remote button from the Main Menu. If no device has been selected as a sound source using BodyLink, then the Remote Select Menu may also be accessed from the Play Mode Control and PC screens and the Head Speaker Control screen. If a device has been selected using BodyLink, then the specific device name will be shown on those screens (excluding the Main Menu).

Listed on the Remote Select Menu will be the specific device buttons that have been programmed. Select the device of interest and the device-specific control screen will appear. To add new device-specific controls see Programming the Remote Control below.

Programming the Remote Control:

1. From the Remote Select Menu press the "New" button. A list box will appear with a list of device types. Highlight the device type of interest by pressing on the screen directly or using the navigation buttons and then press the center select button.
2. A list of brands will appear. The most common brands will appear on the left followed by a scroll list. Select the brand of interest (the large buttons on the left or from the list of brands in the scroll list box) and a scroll list box of models will appear. If the brand of interest is not listed, please use the Learn Mode to program the Control Link for the desired device (see below).
3. Select a model from the scroll list.
4. Press the new button that you have just created. Rename it if you choose.
5. Test the functions from the newly created remote control screen
6. If the buttons on the new remote control screens don't work properly select a different model number and retry. To select a different model, press the "Edit" button followed by the device button that you've just created. Then press the "Select Model" button that appears on the screen.
7. If there isn't a model number that works, please use the Learn Mode to program the Control Link for the desired device (see below).
8. Repeat steps 1 through 7 as necessary until the Remote Control is programmed for all the devices you wish to control.

To Rename or Delete a created device button, press the "Edit" button followed by the selection of interest.

Using the Remap function:

When you add a device to the Remote Select Menu, you may wish to overwrite the functions which are selected by default. Follow the procedure below to do so by mapping a different available function to one of the button on the remote page:

1. On the device page, press the "Remap" button, followed by the button that you wish to overwrite. The button will be highlighted with a red border, and a list will pop up with the functions that are available for you to map to the selected button. The text on the button will change to the new function.

Using the Learn Mode:

When you add a device to the Remote Select Menu, you may wish to overwrite the functions which are selected by default. Follow the procedure below to do so by learning a function from another remote control:

1. On the device page, press the "Learn" button, followed by the button that you wish to overwrite. The button will be highlighted with a red border.
2. Setting both the Control Link and the remote control that you wish to learn the function from on a flat surface, point the remote control into the top of the BodySound Control Link. Place the remote about 3 inches away and centered on the Control Link.
3. Press the button of the function that you wish to learn on the remote, being careful to keep the remote and the Control Link from moving.
4. The text on the selected button on the Control Link will change to "Learned". You can now rename the button with the name of the function that you have just learned.

Restoring the default function of a button:

1. Press the "Restore Default" button on the device page, followed by the button you wish to restore. The default command for that button will be restored.

Maintenance

Any maintenance issues or repairs beyond the routine maintenance described below should be referred to an authorized repair facility.

Structural

Routine maintenance can prevent a structural problem from occurring. It is therefore recommended that periodically (every six months) or earlier if rattling, other noises, or problems arise, that you check the following hardware connections for tightness. You will need the following tools:

- 7/16, 9/16 and 3/4 inch box end wrenches.
- #2 Philips head screwdriver.

1. On the underside of the arms and spacers check to see that the lock-nuts are all tight. Also check to see that the feet are secure and that there is no gap between any of the feet and the base of the arm or spacer above the top of the feet.

2. Turn off the amplifier, disconnect the seat speaker cable and then lift up the seat cushion (carefully as to not pull on the seat driver cable if it gets caught) and inspect the following:
   a. Check the U-bolts/nuts securing the torsion springs to the vertical spring mounting plates.
   b. Check the U-bolts/nuts securing the torsion springs to the horizontal spring mounting plates.
   c. Check the nuts securing the horizontal spring mount plates to the arm or base plates.
   d. Check the nuts securing the horizontal tie bar to arm, spacer, and/or base plates on both sides.
   e. Check that the leg rest mechanism (metal extendable arms) is firmly attached to the leg rest mounting plates on the seat frame.
   f. Check to see that the leg rest tie bar (with the leg rest mounting bracket) is tightly attached to each of the leg rest arm extensions.
   g. Check to see that the leg rest cushion is securely bolted to the extendable leg rest arms.
   h. Check the bolts/nuts securing the seat frame hinges to the back frame hinges.
   i. Check to see if the detent pin is securely attaching the back part of the leg rest motor to the leg rest motor mounting bracket on the seat frame and that the retaining clip is in place.
   j. Check to see that the detent pin is securely attaching the front part of the leg rest motor to the leg rest mounting bracket on the leg rest and that the retaining clip is in place.

   Reconnect the seat driver cable to the amplifier and turn on the amplifier.

3. Remove the back cover and inspect the following:
   a. Check to see that the detent pin or bolt is securely attaching the upper part of the recline motor to the recline mounting bracket on the back frame and that the retaining clip or nut is in place.
   b. Check to see that the detent pin is securely attaching the lower part of the recline motor to the recline mounting bracket on the seat frame and that the retaining clip is in place.
   c. Check to see that the bolts attaching the rectangular back frame to the wood on the back of the back cushion are tightly secured – do not tighten if secure or over-tighten if they require tightening.

d. Check to see that the bolts attaching both horizontal brackets to the spine speaker box are tightly secured – do not over-tighten.
e. Check to see that the bolts securing the head speaker boxes to the wood on the back of the back cushion are tightly secured – do not over-tighten.

Tighten (but **do not over-tighten**) any loose bolts/nuts and secure any loose detent pins. Replace the back cover. When replacing the seat cushion ensure that it is resting flat on the seat frame—if the holes on the bottom of the seat cushion aren't aligned with the bolts securing the leg rest to the seat frame the seat cushion will not rest flat on the seat frame. Pushing the seat cushion back against the seat hinges will allow you to align the holes with the bolt heads.

Leather

Leather is a material that is easily maintained. By properly caring for your leather you will preserve the value of your furniture for years to come. Just perform a few simple tasks in order to keep your leather looking and feeling good for years. Here are some tips and tricks for keeping leather furniture beautiful.

General Leather Care Tips

1. Avoid using or placing sharp objects on leather goods. Do not sit on your leather furniture with keys or other sharp items hanging from your belt loops or sticking out of your pockets. Pets with sharp claws can also scratch or tear the leather. Leather is very durable but can still be damaged.
2. Under normal use, regular dry-cloth dusting and vacuum cleaning in crevices or along the bottom is all that is necessary to clean your furniture.
3. Clean leather, preferably once a month if the furniture is used daily. At minimum, this should be done four times a year. Don't rub or apply extreme pressure when cleaning. Sponge lightly with water and if necessary a mild soap like Neutrogena until all dirt and stains are absorbed.
4. Blot spills up immediately.
5. The use of a good leather conditioner is recommended every 6-12 months.
6. Safeguard your furniture from sun and direct light. Like upholstery, leather can fade to some degree if exposed to the sun.
7. Place your furniture a minimum of two feet from radiators and other heat sources.
8. Avoid air pollution such as cigar or cigarette smoke and cooking fumes, which can cause leather to fade or change color.
9. Avoid resting newspapers and magazines on the surface of your leather furniture. Printers' inks can leach into the leather under prolonged contact with newsprint or glossy magazine covers.

Experiential™ seating is covered with a 100% top-grain, full aniline dyed, leather. Vacuuming and cleaning with a damp cloth and a mild soap solution is generally all that is necessary. If desired, cleaning with a leather protection cream can be performed every six to twelve months, however you may wish to avoid the perforated sections of the leather.

Generally, leather care includes cleaning, conditioning, polishing, protection, and creating a healthy environment. When deciding on a product that fits your needs, be mindful of which type of product you're considering for each level of care. Look for words that explain how the product is to be used. Remember to work on your leather in a well-ventilated area. Some leather care products are very potent and can cause irritation—check the warnings/cautions on the label.

1. *Cleaning*
   To clean a leather item, first choose a water-based cleaner that will help preserve the natural lubricating oils instead of removing them. For example, saddle soap is a commonly used product for equestrian tack. It is meant to be used as a cleaner and a protector from moisture, but what it also does is to strip leather of natural oils. It shouldn't be used on your furniture. Also, select a cleanser that does not leave behind any greasy residue. Residue makes leather susceptible to bacteria and can break down the stitching.

   Before applying anything to your leather, be certain to test it out for effect and possible color alteration on an inconspicuous area of the furniture. Once you've decided that the leather care product is acceptable to use, apply it to your furniture. Then, with a slightly dampened cloth, remove the cleaning product.

2. *Conditioning*
   Leather conditioners are meant for occasional use. They contain fats and/or oils that help lubricate leather and replenish the suppleness. Look for a product that will penetrate the strong fibers in leather, but avoid any that include petroleum or mineral oils. While petroleum by-products won't damage your leather immediately, they do over a period of time. Again, just as with cleaning, avoid thick, greasy conditioning treatments for the best care of your leather.

3. *Polishing*
   Polishing is done for special occasions when you want a more glossy finish on your leather. There are a couple things to be cautious of when purchasing a polishing agent. Some products contain coloring factors that will rub off on things you come in contact with. Some products also have a tendency to clog the pores in leather or dry leather out. Just as with cleaning, be sure to test out the product on a small area and when ready, buff to a shine.

4. *Protection*
   Moisture barriers are vital in preventing liquid spills from damaging leather. Stiffness may happen if leather isn't protected beforehand. The one negative with using a moisture barrier product is that they tend to fill in the pores that makes cleaning, conditioning, and polishing more difficult.

5. *Removing Mildew*
   To remove mildew from leather, use a combination of one-cup rubbing alcohol per one-cup of water. Wipe the affected area with a cloth dipped in the diluted alcohol solution. Allow it to dry. If the mildew persists, use mild soap and water that contains a germicide, then remove with a clean dampened cloth and allow it to dry. To avoid mold and mildew maintain proper climate levels in your home. Excessively high humidity levels can promote the growth of mold and mildew.

6. *Storing Leather*
   Leather is a natural material and should never be stored in plastic because it promotes the growth of mildew and bacteria - both of which can ruin the leather. Store leather in a cool, dry place away from heat.

7. *Wet Leather*
   An important key to keeping leather in its best condition is to treat wet leather before it has an opportunity to dry. Remove any dirt or stains with a cleaning agent, then condition while the pores are still fully responsive. Always remember to dry leather away from heat.

8. *Removing Stains*
   Fresh stains from things such as blood and food should be cleaned up as soon as possible with a damp cloth. Stains from oil or grease can be lifted by crushing ordinary blackboard chalk, sprinkling the area, and leaving the powder on for a twenty-four hour period. Do not rub the powder in. Allow the power to sit for 24 hours. To clean, simply use a leather care brush to remove the powder. While fresh stains can be treated and cleaned on your own, ground-in stains should be cared for by a professional cleaner who deals in leather.

9. *Environmental and Usage Precautions*
   There are some simple things you can do in your home to protect your leather furniture from unnecessary damage:
   a. Prevent color fading caused by the sun's UV rays. Like other upholstered and wood furniture, try to place your leather furniture in locations where it will not be exposed to excessive sunlight levels. Use shades, blinds or draperies to help block UV rays. Consider using window tinting or film to block UV rays that might otherwise harm your leather furniture.
   b. Maintain a safe distance between your leather furniture and heat sources in your home such as vents, radiators, and fireplaces. Prolonged exposure to heat can damage your leather furniture's upholstery.
   c. Prevent cracking and mold formation by maintaining proper climate levels in your home. Excessively low relative humidity levels and high heat can lead to cracking in leather upholstery; excessively high humidity levels can promote mold growth.
   d. Keep sharp objects away from your leather furniture. Sharp objects, including pets with sharp claws, can create tears and scratches in the leather upholstery. While small tears and scratches are not usually difficult to repair, it's best to avoid them in the first place.

Some Additional Leather Cleaning Instructions

1. Some spills and stains such as coffee, ketchup, milk, etc. may require a leather cleaner. Please refer to the instructions on the leather cleaner product.
2. For oil-based spills and stains such as popcorn grease, salad dressing or other non-water-soluble spills, wipe the leather with a clean, dry cloth. Allow for the remainder of the stain to dissipate into the leather over a 24-hour period. Do not

use Leather Cleaner, Leather Protector/Conditioner, water or soap on oil-based stains. If the stain persists, it is recommended that a professional leather specialist clean the leather to avoid any potential damage to the leather itself.

3. Never use saddle soaps, oils, all purpose cleaners or solvents. Use of these products could damage the finish. Modern tanning techniques do not require such products. Most spills will blot up easily with a dry cloth or paper towel.

4. For minor spots and spills, wipe up any excess liquid immediately with a clean absorbent cloth or sponge. If necessary, use a slightly damp soft cloth with clean lukewarm water, and let it air dry naturally. If water is used, clean the entire area where the spot occurred.

5. Never soak the stain with water. This could cause more damage than the stain itself.

6. To repair minor or slight surface scratches, use a chamois or clean fingers to gently buff the scratch. If needed, moisten lightly with distilled water to work scratches out.

7. Consider seeking professional assistance as improper cleaning might damage the leather.

How To

1. **How do I turn the Control Link on?** The Control Screen turns on whenever it is moved or the display or a button is pressed. See Control Screen Overview.

2. **How do I turn the Control Link off?** As long as the Control Screen is plugged in to the USB connection in the console of the arm or amplifier it will remain on. Unplugging it will drain the battery over several hours.

3. **How do I change Seat Number so I can adjust a different seat?** From the Main Menu, Play Mode Control screen, or any screen that allows you to press the Seat # button and select a new seat number from the drop down menu. See Seat Numbers.

4. **How do I tell the Control Link that the BodyLink receiver is connected to the system?** From the Main Menu press "Settings" and then press "System Settings". Press the BodyLink button and use the up/down parts of the navigation buttons to select your choice. The new setting is automatically saved.

5. **How do I turn the BodyLink Airlink setting on/off?** From the Main Menu press "Settings" and then press "System Settings". Press the AirLink button and use the up/down parts of the navigation buttons to select your choice. The new setting is automatically saved.

6. **How do I tell the Control Link that I have arm speakers connected to the BodySound amplifier?** From the Main Menu press "Settings" and then press "System Settings". Press the Arm Speakers button and use the up/down parts of the navigation buttons to select your choice. The new setting is automatically saved.

7. **How do I turn the Pressure Switch on/off?** From the Main Menu press "Settings" and then press "System Settings". Press the Pressure Switch button and use the up/down parts of the navigation buttons to select your choice. The

new setting is automatically saved. Using Mini Link press and hold the Pr/2nd key and when 2nd is displayed on the screen press the mute button.

8. **How do I adjust the timing to automatically mute the sound once I leave my seat?** From the Main Menu press "Settings" and then press "System Settings". Press the Sound Off In button and use the up/down parts of the navigation buttons to select your choice. The new setting is automatically saved.

9. **How do I mute/un-mute the sound from my chair/seat?** Press the mute/un-mute icon on the upper right corner of the screen or the mute button on Mini Link.

10. **How do I adjust the SoundNumber setting?** Press the upper or lower portion (arrow up/down) of the oval SoundNumber (♪#) button (this is a master volume setting and the volume level will automatically adjust itself based on the loudness of the audio content). See SoundNumber section.

11. **How do I adjust the Volume (labeled Arm Vol) setting?** Press the upper or lower portion (arrow up/down) of the oval Arm Vol button (this is a master volume setting but the volume level will <u>not</u> automatically adjust itself based on the loudness of the audio content). Only when the volume button is labeled ♪# will the volume be automatically adjusted. See Volume section.

12. **How can I set/adjust the volume for the Arm speaker pair?** From the Play Mode Controls screen select the Head or Arm Speaker icon. Use the oval button labeled ♪# (if the SoundNumber system is ON) or labeled Arm Vol (if the SoundNumber system is OFF). Press the upper part of the button to increase the head or arm speaker volume and lower part of the button to decrease the head or arm speaker volume. See Volume section.

13. **How can I set/adjust the volume for my Spine, Seat, or Head speakers?** From the Play Mode Controls screen select the appropriate speaker icon. On the next screen, press the speaker button of your choice and adjust the volume as a percentage of the arm speaker SN/Volume (adjust to be more than 100% if you want it louder relative to the arm speaker or less than 100% if you prefer it quieter relative to the arm speaker). See Volume section.

14. **How do I adjust the BodyNumber setting?** Press the upper or lower portion (arrow up/down) of the oval BodyNumber button. See BodyNumber section.

15. **How do I save my settings in a Preset file?** Press "Preset" from either the Play Mode Controls screen or the Main Menu screen and save the currently used settings in a non-factory default Preset file. Please name that file for future use. See Presets section.

16. **How do I adjust the recline of the chair back?** Press any of the recline pictographs on the bottom of the screen or use the switch on the control panel in the console of the arm.

17. **How do I adjust the leg rest on the chair?** Press any of the leg rest pictographs on the bottom of the screen or use the switch on the control panel in the console of the arm.

18. **How do I adjust the EQ (equalizer) function?** From the Play Mode Controls (PMC) Screen press the speaker icon of interest. From the speaker control screen press EQ. Highlight the frequency range of interest and use the up/down portion of the navigation buttons to make adjustments. See EQ section.

19. **How do I change an entertainment device name on the BodyLink screen?**
From the Main Menu press "Settings" and then press "BodyLink Setup". Next, press the device button of interest and then press the "Change Descriptions for Equipment Types". Type in the desired name for the entertainment equipment component. See BodyLink Setup section.

20. **How do I let the Control Link know which of my entertainment devices are connected to which of the BodyLink receiver inputs?** From the BodyLink Setup screen (accessed through the Settings Menu) you can Add or Clear BodyLink input connections and change descriptors used for up to seven entertainment devices. Please use the following steps:
    a. Press the Add Connection button
    b. Press the entertainment device button of interest from the list provided
    c. Press the BodyLink input button that the device is connected to
    d. Repeat steps a. thru c. until all (or up to six) devices connected to the BodyLink receiver are accounted for. See BodyLink Receiver Overview section.

21. **How do I program the Control Screen to operate my other entertainment equipment?** From the Main Menu press "Remote". From here you can identify the make and model of your device and the screen template you wish to use. If necessary you can use the learn mode if your device is not listed. Please see the Remote section.

22. **How do I use the Control Link as a universal remote?**
From the Remote Screen (accessed through the Main Menu) or from the BodyLink screen or the Play Mode Control screen, select which component you would like to operate.

23. **How do I Transfer Presets, Massage template settings, or Universal Remote settings to a USB memory device?** From the "Main Menu" press "Settings", next press "Transfer Settings". Select the relevant option.

24. **How can I select a different input signal for the BodySound Amplifier?** From the Play Mode Controls screen, press the "Amp Input" button and make your selection.

25. **How can I select, save, delete, or rename a Preset file?** From the Main Menu, or Play Mode Controls screen, press the "Preset" button. From here you can rename, delete, or save a Preset or select a Preset to operate your system. If you have been operating your seat in Play Mode and you have changed various default settings that you wish to save, please save and name them as a Preset for future use. Presets can only be saved in either the Local or Global columns, not the factory default column. See Presets section.

26. **How do I access the Play Mode Controls Screen?** From the Main Menu press "Play". See Play Mode Controls section.

27. **How do I set or change my speaker settings?** From the Play Mode Controls screen, press any of the active speaker icons (Head, Spine, Seat, or Arm) and select the settings you wish to modify.

28. **How can I set/adjust the Balance for the Head or Arm speakers?** From the Play Mode Controls screen select the respective speaker icon. On the next

screen, press the "Bal/VSS" button and make the adjustments. See Speaker Balance section.

Using the Mini Link controller, press the 2nd + ♪# button to toggle between the arm balance (ABAL) setting and the head balance (HBAL) setting. With ABAL or HBAL displayed (while still holding down the Pr/2nd button after releasing the ♪# button) press the top of the Vol (speaker) button to adjust balance to the right and the bottom of the Vol (speaker) button to adjust balance to the left for either set of speakers. The balance settings are independent of and will persist after Preset changes.

29. **How can I set/adjust the Virtual Surround Sound for my Head or Arm speakers?** From the Play Mode Controls screen select the Head or Arm Speaker icon. On the next screen, press the "Bal/VSS" button and make the adjustments. See Virtual Surround Sound section.
30. **How can I set/adjust the Mixer for the speakers?** From the Play Mode Controls screen select an active speaker icon. On the next screen, press the "Mixer" button and make the adjustments. See Speaker Mixer section.
31. **How can I set/adjust the Reaction Time for the SoundNumber system?** From the Play Mode Controls screen select the Head or Arm speaker icon. On the next screen adjust the setting under the words "Reaction Time" and make the adjustments. The fastest Reaction Time setting is TV and the slowest is Music. See **SoundNumber** section.
32. **How can I set/adjust the Massage function?** From the Play Mode Controls screen or Program Controls screen select the Seat or Spine Speaker icon. On the next screen, press the "Massage" button and make the adjustments. See Massage section.
33. **How can I Restore Default settings?** Press the Restore Defaults button. This will allow you to restore the default settings for the settings found in the Preset you are using. Pressing this button will reset all of the settings contained in the Preset.

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Troubleshooting

The Control Screen doesn't turn on after it is moved or the touch screen is pressed. See the Control Screen Overview section.
1. Is the USB connecting cable plugged firmly into both the Controller and the control panel in the console of the arm? If not, plug it in. You should be able to use it after a minute or so and while the battery recharges, but you will not be able to use it unattached until the battery recharges more fully.
2. Is the AC power cord plugged into an active outlet and also plugged into the BodySound amplifier? If not, plug it in. The battery in the Control Screen may be depleted and need to be recharged so it may not work when unattached.
3. Is the Control Screen failing to boot-up? Take the end of a paper clip and poke it through the small hole located on the back of the unit. This will re-boot the Control Link's operating system. If this tip fails you will need to have the

rechargeable batteries replaced. Please call BodySound Customer Service at **1 - (877) 943 - 4041**.

No sound is generated by all of the speakers in your seat/chair (the BodySound amplifier is not working). See the **BodySound Amplifier Overview** and **Speakers** sections.

1. Power: Is the amplifier turned on—is the green LED on the back of the amplifier lit? If so, then skip to #1.c., otherwise check items 1.a. to 1.c. and take any required actions.
    a. Does either the recline or leg rest motor work when using the console switches or the Controller? If so, skip to step #1.c.
    b. Is the AC power cord plugged into an active outlet and also plugged into the BodySound amplifier? If not, plug it in. If it is plugged in and the LED is not lit then check the circuit box in your home to see if the circuit breaker is switched off for the circuit that the amp is plugged into. Consider consulting a qualified electrician as you may be overloading this circuit.
    c. If you have a BodyLink receiver is it also plugged in and turned on? The screen display will be on when the unit is on and active. See the **BodyLink Receiver Overview** section.

Note: periodically, since both the BodySound amplifier and BodyLink receiver are computers, it is a good idea to power cycle them (turn the amplifier switch off and then back on and unplug and plug in the BodyLink receiver). If this has not been done for some time, do it now.

2. Is the Pressure Switch setting (see System Settings Screen) ON or OFF? If it is ON you need to be sitting in the chair and leaning against the back in order for sound to be produced. Use the Control Link or laptop software (from Main Menu press Settings and from the Settings Menu press System Settings and then you can toggle the Pressure Switch ON/OFF button). Turn the Pressure Switch setting OFF and see if the seat produces sound or sit down and lean against the back of the chair. See **Pressure Switch** section. With the Mini Link you can toggle the seat switch on and off by pressing and holding the Pr/2nd button down and then pressing the mute button when "2nd" is displayed on the screen.
3. Is the mute button pressed (there is an overlay placed on the speaker icon in the upper right corner of the Control Screen)? If so, press the mute button again to un-mute the system or even if the button appears not to be in a muted condition, try pressing it, but return it to a non-muted condition if that doesn't work. Make sure the seat number denotes the seat you are using. With Mini Link, MUTE will be displayed on the screen.
4. Do you hear sound from other speakers in the room that are connected to the entertainment equipment component that is providing the source of the sound? If not, is the equipment providing the sound turned on or has that equipment been set to mute?

5. Is the SoundNumber or Arm Volume setting too low? Use the Controller to check either the SoundNumber or Arm Volume setting. If the setting is too low then increase it. See **SoundNumber** section.

6. Is the Amp Input selection correct? Press the Play button on the Main Menu and then press Amp Input. Check to see if there is an active Amp Input connection (speaker icon will be placed over the button). If there is, then press the active input button. If there is not then check the connections between the BodyLink receiver and your lead BodySound amplifier and the connections between the lead amplifier and all other BodySound amplifiers in your configuration. See **Amp Input Screen** section.

7. Is the BodyLink Input selection correct? If you do not have a BodyLink receiver proceed to step #9. Press the Play button on the Main Menu and then press BodyLink and check to see if the input selected is associated with the entertainment equipment that is playing. If it is not correct, select the correct input. Check to see that your entertainment equipment components are turned on, not muted, and properly connected to the BodyLink receiver. If you are uncertain that the connections between the BodyLink receiver and your entertainment equipment are properly depicted on the BodyLink screen please revisit the BodyLink setup procedure (from the Settings Menu) and ensure that your connections and the depiction of those connections match. See **BodyLink Receiver Overview** section.

8. Are you using AirLink? From the Main Menu press Settings. Then press System Settings. Is the AirLink button set to On? If not, press it until it is On. If it is, toggle it Off and then back On.

9. Is the Signal Input from your entertainment equipment too low? If you are using a digital connection between your entertainment equipment and either the BodyLink receiver or the BodySound amplifier then this is extremely unlikely. However, if you are using analog connections (right and left stereo connection—RCA plugs), particularly from an AV Surround Receiver, then the input voltage (coming into the BodyLink receiver and/or BodySound amplifier) may be too low.
   a. From the Diagnostic Menu Screen press Inputs. Then choose BodyLink. Check the Line Level Input Voltage of the Analog signal. Determine if it is less than 25%.
   b. If it is and the signal is being inputted through your BodyLink receiver then use the BodyLink Analog Gain button to increase the gain until the Line Level Input Voltage is above 25%. Making this change affects the BodyLink receiver, as this is where the gain is applied to the signal.
   c. If the Line Level Input Voltage is well below 25% and the signal is being inputted directly into the BodySound amplifier (Aux input), then you will need to increase the volume of the input device or use a preamp to amplify the signal before it is inputted into the BodySound amplifier. Alternatively, determine if there is another way to input that signal from another component device within your system (from the DVD/CD player versus the AV Surround Receiver using splitter cables).

10. Are the speaker cables properly connected?
    a. Press Play from the Main Menu and then press Diagnostics. From the Diagnostics menu press Test Outputs. Press each of the speaker icons to determine which speaker(s) may not be functioning properly. If they are all working, proceed to step 11.

b. If no sound is produced from the seat driver, then check to see that the seat driver cable is properly connected to the amplifier.
c. If all or some of the speakers in the back (head and spine speakers) are not working properly check to see that the speaker cable is properly connected to the amplifier.
d. If sound is not coming from one of the head speakers or the spine speakers, then remove the back cover and ensure that the speaker connectors are securely mated.
e. If sound is not coming from both of the Arm speakers make sure that the Arm Speakers setting in the System Settings screen is set to Present. The Arm Speaker buttons in the speaker array should be present if you wish to use Arm speakers that are connected to the BodySound amplifier. If sound is not coming from one of the arm speakers, ensure that the arm speaker cables are properly connected to the amplifier.
f. If the cables are all properly mated and a speaker is still not functioning then call BodySound Customer Service at **1 - (877) 943 - 4041**.

11. Can the incoming audio signal be decoded? From the Diagnostic Menu Screen press Amp Input. If the Incoming signal type cannot be identified, then the BodySound amplifier is unable to decode the signal it is receiving. Check the menu (audio) section of your DVD player. You may have to remove any DVDs from the tray before you can access the correct menu. Switch the default to Dolby 5.1 or Dolby digital if was set to stereo or DTS. Change the sound source (CD, DVD, etc.) or sound source equipment (change BodyLink or Amp Inputs if necessary and turn on the corresponding piece of entertainment equipment) and see if sound is produced.

No or little sound is generated by some of the BodySound speakers.
1. Which of the Speakers are not functioning properly? From the Diagnostics Menu press Test Outputs. Press the speaker buttons of interest to see if sound is produced. Do this for each speaker to determine how each speaker sounds. Note which one(s) are not producing enough sound. If they are each producing an adequate signal proceed to step 2.d. because the connections between these speakers and the BodySound amplifier are functioning properly. See **Test Outputs** section.
2. Are the speaker cables properly connected to the BodySound amplifier? Make sure that the speaker and seat driver connectors are properly plugged into the amplifier on the right side of the BodySound amplifier in a secure fashion. Ensure that the Arm speaker connections are properly made on the back panel of the amplifier.
a. If no sound is produced from the seat driver, then check to see that the seat driver cable is properly connected to the amplifier.
b. If all or some of the speakers in the back (head and spine speakers) are not working properly check to see that the speaker cable is properly connected to the amplifier.
c. If sound is not coming from one of the head speakers or the spine speakers, then remove the back cover and ensure that the speaker connectors are securely mated.

d. If sound is not coming from both of the Arm speakers make sure that the Arm Speakers setting in the System Settings screen is set to Present. The Arm Speaker buttons in the speaker array should be present if you wish to use Arm speakers that are connected to the BodySound amplifier. If sound is not coming from one of the arm speakers, ensure that the arm speaker cables are properly connected to the amplifier.

e. If the cables are all properly mated and a speaker is still not functioning then call BodySound Customer Service at **1 - (877) 943 - 4041**.

3. Are the volume settings too low? Check the SoundNumber or Arm Volume setting and increase as necessary as long as the overall system volume is not too high. For Spine, Seat, and the Head speakers make sure that the percent volume setting (As compared to Arm SN/Vol) on any of the speaker volume screens is not too low. See **Volume** section.

4. Are the balance settings skewed too much to one side or the other? For the Head and Arm speakers check the Balance setting and adjust as necessary if the Balance setting is skewed away from the side that is producing too little volume. See **Speaker Balance** section.

5. Are the Mixer settings correct? For the speaker(s) of interest, proceed to the Mixer Screen and ensure that adequate sound-producing signal is being directed to the speaker(s) of interest. See **Speaker Mixer** section.

The overall sound volume is too low.

1. Is your SoundNumber or Arm Volume setting too low? Check the setting in one of the Speaker Volume screens and increase it if it can be increased. See the **Speaker Volume and SoundNumber** section.

2. Is the Signal Input from your entertainment equipment too low? If you are using a digital connection between your entertainment equipment and either the BodyLink receiver or the BodySound amplifier then this is very unlikely. However, if you are using analog connections (right and left stereo connection—RCA plugs), particularly from an AV Surround Receiver, then the input voltage (coming into the BodyLink receiver and/or BodySound amplifier) may be too low.

   1 From the Diagnostic Menu Screen press Inputs. Then choose BodyLink. Check the Line Level Input Voltage of the Analog signal. Determine if it is less than 25%.

   2 If it is and the signal is being inputted through your BodyLink receiver then use the BodyLink Analog Gain button to increase the gain until the Line Level Input Voltage is above 25%. Making this change affects the BodyLink receiver, as this is where the gain is applied to the signal.

   3 If the Line Level Input Voltage is well below 25% and the signal is being inputted directly into the BodySound amplifier (Aux input), then you will need to increase the volume of the input device or use a preamp to amplify the signal before it is inputted into the BodySound amplifier. Alternatively, determine if there is another way to input that signal from another component device within your system (from the DVD/CD player versus the AV Surround Receiver using splitter cables).

The sound is distorted (sound is tinny, mixed with static, or there is reverberation) or the dialogue is garbled or isn't as clear as it should be. Distortion may result from a combination of the following causes so please check each item listed below to best determine how to adjust your settings.

1. How high is your master volume setting (SoundNumber or Arm Vol setting) and can it be decreased? Check this setting in one of the Speaker Volume screens and decrease the setting if it can be decreased. See **Volume** section.
2. Is the distortion due to excessive volume from the Spine and/or Head speakers and/or the Seat driver? Each of the Speaker Volume screens contains percent values "As compared to Arm SN/Vol" that set the volume for these speakers. If these values are excessive the sound can distort. Reduce these values below 200 and continue to reduce them to 100 to see what effect this has. This step may well reduce or eliminate the distortion, but continue with steps 3, 4, and 5, after you have reset the percent values (As compared to Arm SN/Vol) back to where you had them because the real culprit may likely be elsewhere or at least contribute to the problem. See **Volume** section.
3. Are you adding other sound signals above the Mix which could distort the sound? Signals from the Massage generators and BodyNumber system are each additive to the stereo/mono or 5.1 signals mixed in the Mixer. If the distortion is limited to the spine speakers and/or Seat driver reduce the Massage or BodyNumber setting. See **Massage** and **BodyNumber** sections.
4. Are the EQ settings creating a distorted sound? From the relevant Speaker Volume screen(s) press EQ. If you have increased the settings significantly in any or more than one frequency band this may be the cause of your distortion. Lower any segments that are suspect and determine if the distortion persists. See **EQ** section.
5. Are you inputting an analog signal into the BodyLink analog inputs or directly into the BodySound amplifier (right and left stereo inputs in the console of the arm or directly into the back panel of the amplifier)? The input voltage may be too high. The distortion may be evident in every speaker, but quite obvious in the head speakers.
   a. From the Diagnostic Menu Screen press Inputs. Then choose BodyLink. Check the Line Level Input Voltage of the Analog signal. Determine if it is less than 25%.
   b. If it is and the signal is being inputted through your BodyLink receiver then use the BodyLink Analog Gain button to increase the gain until the Line Level Input Voltage is above 25%. Making this change affects the BodyLink receiver, as this is where the gain is applied to the signal.
   c. If the Line Level Input Voltage is well below 25% and the signal is being inputted directly into the BodySound amplifier (Aux input), then you will need to increase the volume of the input device or use a preamp to amplify the signal before it is inputted into the BodySound amplifier. Alternatively, determine if there is another way to input that signal from another component device within your system (from the DVD/CD player versus the AV Surround Receiver using splitter cables).

The Lead seat amplifier is producing sound, but there is no sound in the other seat(s).
1. Is the BodySound amplifier under the lead seat properly connected to the BodySound amplifier under the adjacent seat? Check to see that the Cat5 and/or Optical cables are properly connected between the amplifier under the lead seat and the adjacent amplifier and that the rest of the amplifiers are similarly connected.
2. Is the Amp Input setting for seat 2 (and beyond) set properly? If the lead seat is receiving its signal from the BodyLink Receiver then the other seats should have an Amp Input setting of BodyLink. If the lead seat is receiving the signal from an Optical Input directly then the other seats should have an Amp Input setting of Optical If the lead seat is only receiving a signal from its Aux input then that input will not be transmitted to the other amplifiers. See **Amp Input Screen** section.

The level of vibration or resonance is too low.
1. Is the percent volume setting for the spine speakers and seat driver too low? Check the percent values "As compared to Arm SN/Vol" for the spine speakers and seat driver. Increase those settings as necessary, particularly if they are set to less than 100, which means they would be set to less than 100% of the Arm speaker setting. See **Speaker Volume and SoundNumber** section.
2. Are the Mixer settings for the spine and seat speakers excluding necessary signal components? See the Mixer screens for the Spine and Seat speakers for both stereo and 5.1 audio source data. Ensure that the Mixer settings are not set to mute or include an appropriate mix of subwoofer, center, and front channels. Determine if they are different from the default Preset Mixer settings.
3. Are the EQ settings for the lower frequency bands set too low for the Spine speakers and Seat driver? If the bar segments for the lower frequency bands are less than 0, then you are diminishing those frequencies in the output of those speakers. Increase those settings to 0 or above if you wish, however increasing the lower frequency bands too much may change the sound that you hear. See the **Speaker Equalizer** section.
4. Is the BodyNumber setting too low? Check the BodyNumber setting and increase it as necessary. This will increase the contribution of the Generated Low Frequency Content that is added to the output for the spine and seat speakers depending upon whether you have selected that those signals be added. See **Body#** section.
5. Is the sound source quiet and does it consist of mainly high frequency content? If so, and the BodyNumber setting is relatively low, then you would not expect to feel much vibration. To add more vibration in this situation consider turning on one or both Massage Generators (press Massage from the Seat Volume control screen) or increase the BodyNumber setting. See **Massage** sections.

The BodySound chair does not turn on and off automatically when you get in and out of it, respectively.

Check to see that the Pressure Switch setting is ON in the System Settings screen. The automatic on/off function will only work if this setting is ON. See **Pressure Switch** section.

The BodySound chair leans to one side or the chair makes clicking or other sounds when rocking back and forward. See **Maintenance** section.

1. Review and perform chair maintenance as described in the Maintenance section, as one or more of the bolts/nuts may have become loose. Turn off the amplifier, disconnect the seat speaker cable and then lift up the seat cushion (carefully as to not pull on the seat driver cable if it gets caught) and inspect the following:
   a. Check the U-bolts securing the torsion springs to the vertical spring mounting plates.
   b. Check the U-bolts securing the torsion springs to the horizontal spring mounting plates.
   c. Check the nuts securing the horizontal spring mount plates to the arm, spacer, or base plates.
   d. Check the nuts securing the horizontal tie bar to arm, spacer, and/or base plates.
   e. Check the bolts securing the seat frame hinges to the back frame hinges.
   f. Check to see if the detent pin is securely attaching the lower part of the recline motor to the recline mounting bracket on the seat frame.
   g. Remove the back cover and check to see that the bolt is securely attaching the upper part of the recline motor to the recline mounting bracket on the back frame.
   h. Check to see that the feet on the arms or bases are tightly attached and fully flush with the bottom of the arms and bases.
2. Tighten **(but do not over-tighten)** any loose bolts or feet and secure any loose detent pins. Replace the seat cushion ensuring that it is resting flat on the seat frame—if the holes on the bottom of the seat cushion aren't aligned with the bolts securing the leg rest to the seat frame the seat cushion will not rest flat on the seat frame. Pushing the seat cushion back against the seat hinges will allow you to align the holes with the bolts. Reconnect the seat driver cable to the amplifier and turn the amplifier on.

The recline mechanism does not work with either the Control Screen or when using the arm console switch.

1. Is the amplifier turned on—is the green LED lit? If so, then skip to step #2, otherwise check items 1.a. and 1.b. and take any required actions. See **BodySound Amplifier Overview** section.

    a. Is an attached Control Screen or Mini Link receiving power-is the leg rest motor working? If so, skip to step #2. See **Control Screen Overview** section.

    b. Is the AC power cord plugged into an active outlet and also plugged into the BodySound amplifier? If not, plug it in. If it is plugged in and the green LED is not lit check the circuit box in your home to see if the circuit breaker is switched off for the circuit that the amp is plugged into. Consider consulting a qualified electrician as you may be overloading this circuit.

2. Are the electrical connections securely attached? Make sure that the recline cable from the BodySound amplifier is securely connected to the power cable attached to the recline motor.

The recline motor seems to be working, but the chair is not reclining properly or there is excessive rattling around the recline motor. See **Maintenance** section.

1. Is the recline motor securely attached to the seat and back frame? Check the following connections:
    a. Check to see if the detent pin is securely attaching the lower part of the recline motor to the recline motor mounting bracket on the seat frame.
    b. Remove the back cover and check to see that the bolt is securely attaching the upper part of the recline motor to the recline mounting bracket on the back frame.
    c. Check the bolts securing the seat frame hinges to the back frame hinges.

2. Tighten **(but do not over-tighten)** any loose bolts and secure any loose detent pins.

The leg rest mechanism does not work with either the Control Screen or when using the arm console switch.

1. Is the amplifier turned on—is the green LED lit? If so, then skip to step #2, otherwise check items 1.a. and 1.b. and take any required actions. See **BodySound Amplifier Overview** section.
    a. Is an attached Control Screen or Mini Link receiving power-is the recline motor working? If so, skip to step #2. See **Control Screen Overview** section.
    b. Is the AC power cord plugged into an active outlet and also plugged into the BodySound amplifier? If not, plug it in. If it is plugged in and the green LED is not lit check the circuit box in your home to see if the circuit breaker is switched off for the circuit that the amp is plugged into. Consider consulting a qualified electrician as you may be overloading this circuit.

2. Are the electrical connections securely attached? Make sure that the leg rest cable from the BodySound amplifier is securely connected to the power cable attached to the leg rest motor. See the **Connecting the Seat Amplifier to the Speakers, Motors, and Console** section.

The leg rest motor seems to be working, but the leg rest is not functioning properly or rattling. See **Maintenance** section.

1. Is the leg rest motor securely attached to the seat frame and leg rest? Check the following connections:
    a. Check to see if the detent pin is securely attaching the back part of the leg rest motor to the leg rest motor mounting bracket on the seat frame.
    b. Check to see that the detent pin is securely attaching the front part of the leg rest motor to the leg rest mounting bracket on the leg rest tie bar.
2. Is the leg rest mechanism (metal extendable arms) firmly attached to the leg rest mounting plates on the seat frame?
3. Is the tie bar (with the leg rest mounting bracket) securely attached to each of the extendable arms?
4. Is the leg rest cushion securely bolted to the extendable leg rest arms?
5. Tighten **(but do not over-tighten)** any loose bolts and secure any loose detent pins.

Repairs:

The products that BTI designs, manufactures, and sells are modular in nature for greater manufacturability, support, and servicing. This design feature allows BTI to service our customers more efficiently.

Instructions for module disassemble can be supplied directly from Customer Service. If you need additional support or have any questions during disassembly, please call Customer Service at BTI for assistance. After repair, Customer Service will provide instructions and phone assistance if necessary for product re-assembly.

Product Returns:

BTI Customer Service will only issue Return Material Authorization numbers (RMA numbers) for products being returned to BTI or its Service Center in Minnesota, for authorized repair and/or evaluation. BTI will not issue RMA numbers for, but not limited to:

- Buyers remorse (unless purchased within 30 days from BTI directly),
- Freight Damage for shipments to end-user, except for shipments direct from BTI or an authorized Affiliate, or
- For products purchased from a reseller.

Any returns for the above circumstances require a written request to a Sales or Customer Service Manager at BTI for a return allowance.

Any allowed returns will be subject to credit deductions that are assessed in the returns and refurbishment process, which may include, but are not limited to: costs related to shipping, freight, and handling, restocking fee, inspection and evaluation, and refurbishment. Any allowed returns that include customer's own materials (COM) will be subject to an additional credit deduction for the associated costs of manufacture using COM. BTI is not responsible for any applicable duties, taxes, and brokerage fees associated with returned parts or products.

Shipping to BTI:

For returns, the consumer is responsible for packing the product in the original box(es) or in approved packaging that is available for sale from BTI. Shipping and freight coverage for repairs under warranty requires scheduling with BTI and only includes "curb-side" pickup and delivery. Products received without a valid RMA number or one clearly marked on the box will be refused.

Consumers in other countries should first check with their own Customs Authority and register the merchandise before sending it to BTI for repair. Every country's Customs Authority has a different procedure and documentation for repairs, so it is important that this information is obtained prior to sending the product to the Service Center at BTI.