

BassLink+4™

instructions



 **Infinity**®

BassLink+4™

INTRODUCTION

THANK YOU for choosing the Infinity BassLink+4™ System Upgrade Solution. BassLink+4 has been designed to provide the kind of high performance that used to require big, clumsy enclosures, large amplifiers and complex installation. To ensure maximum performance, we strongly recommend that installation be entrusted to a qualified professional. Although these instructions explain how to install the BassLink+4 in a general sense, they do not show the specific installation methods for your particular vehicle. If you feel you do not have the necessary tools or experience, do not attempt the installation yourself; rather, ask your authorized Infinity car audio dealer about professional installation options. Remember to keep this manual and your sales receipt in a safe place for future reference.

HEARING WARNING!

Playing loud music in a vehicle can permanently damage your hearing, as well as hinder your ability to hear traffic. We recommend using low volume levels while driving. Infinity accepts no liability for hearing loss, bodily injury or property damage resulting from the use or misuse of this product.

PARTS LIST

- (1) Powered subwoofer
- (2) Mounting feet
- (4) 3mm x 18mm Screws to attach mounting feet to sub
- (4) #8 x 1" Screws to attach feet to vehicle
- (1) 5m Phone cable
- (1) Remote bass level/phantom control
- (2) #6 x 3/4" Screw to hold remote control
- (2) 5m Speaker input cables
- (2) 5m RCA input cables
- (1) 35 Amp fuse
- (1) 25 Amp fuse
- (1) Phantom setup CD
- (1) Owner's manual
- (1) Warranty card

CHOOSING A MOUNTING LOCATION

Choose a mounting location that doesn't interfere with cargo, fold-down rear seats or the trunk lid. The best location is usually a corner of the trunk or cargo area, as shown in Figures 1 and 2.

These locations, in addition to being out of the way, will provide the best sonic reproduction in the 60Hz to 100Hz range because the woofer output will be "corner loaded" against the vehicle's walls. In any case, BassLink+4 must not interfere with the safe operation of the vehicle.

Figure 1. BassLink+4 in a car's trunk.

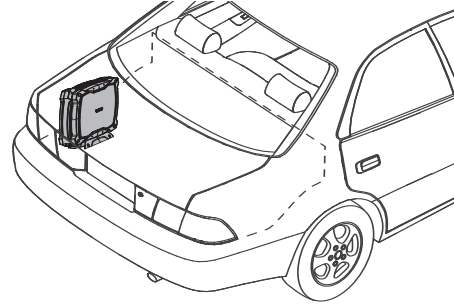
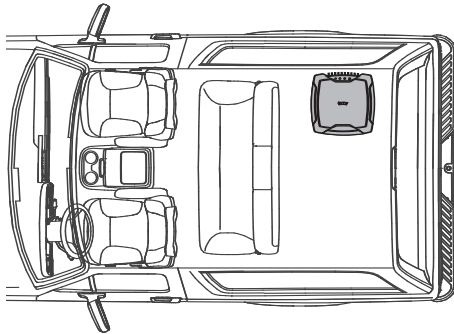


Figure 2. BassLink+4 in an SUV's cargo area.



MOUNTING BASSLINK+4

CAUTION: Make sure mounting screws will not puncture wiring harnesses, brake or fuel lines, or the vehicle's fuel tank. Some or all of these may be located behind or under the mounting surface.

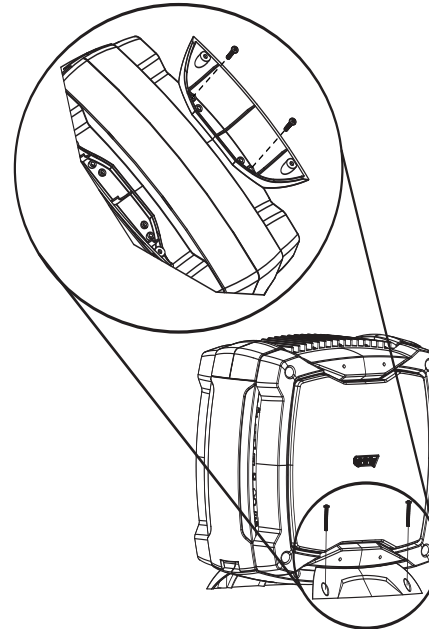
VERTICAL MOUNTING

Position BassLink+4 so that the heatsink is facing down and the bottom of the unit is up. Align the mounting feet as shown in Figure 3. Secure the feet using the supplied machine screws.

Note: Place BassLink+4 (with its feet) so the controls are easy to adjust.

Securely mount BassLink+4 to the mounting surface with the four enclosed self-tapping screws.

Figure 3. Vertical mounting of BassLink+4.



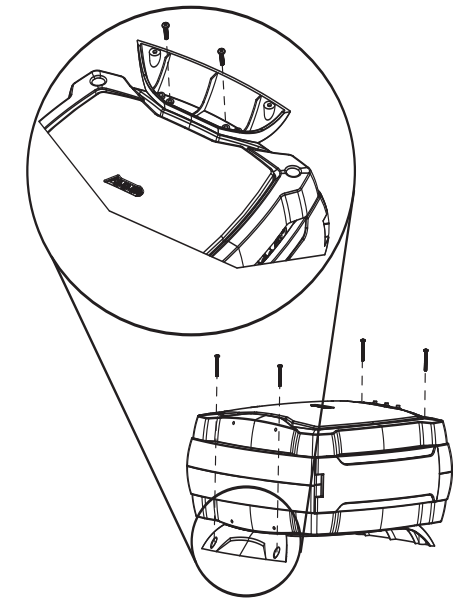
HORIZONTAL MOUNTING

Position BassLink+4 so that the controls are facing down and the back of the unit is up. Align the mounting feet as shown in Figure 4. Secure the feet using the supplied machine screws.

Note: Place BassLink+4 (with its feet) so the controls are easy to adjust.

Securely mount BassLink+4 to the mounting surface using the four enclosed self-tapping screws.

Figure 4. Horizontal mounting of BassLink+4.

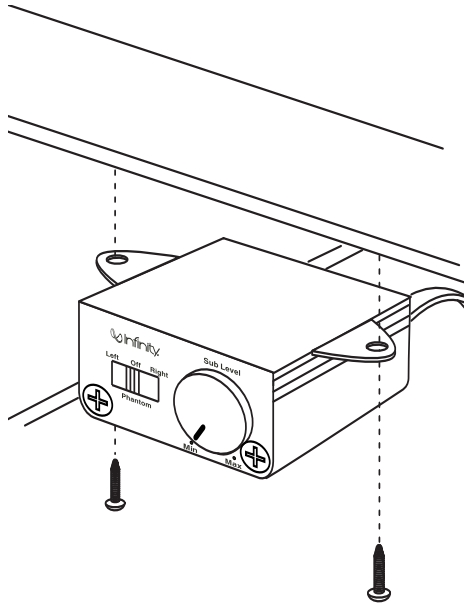


INSTALLING THE REMOTE CONTROL

UNDER-DASH MOUNTING

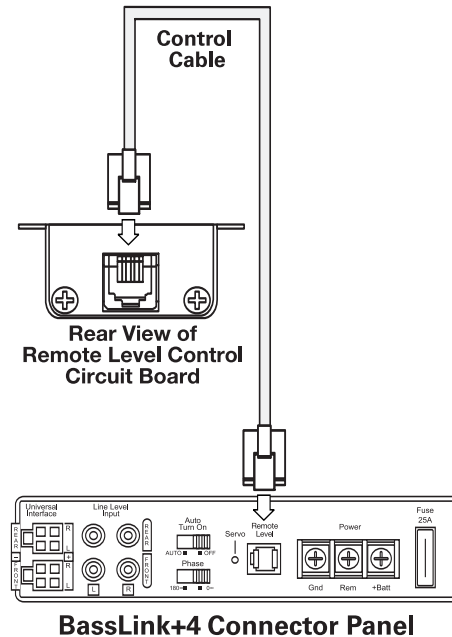
Select a mounting location that allows easy access to the control while driving. Using the REMOTE LEVEL control as a template, mark and drill holes in the mounting surface. Attach the REMOTE LEVEL control using the mounting screws provided (Figure 5).

Figure 5. Under-dash mounting of the REMOTE LEVEL control.



Route the cable behind the dash or other interior panels and under the carpet. Do not route the cable outside the vehicle. Connect the RJ11 cable between the RJ11 receptacle on the BassLink+4 and the receptacle on the REMOTE LEVEL control (Figure 6).

Figure 6. REMOTE LEVEL control electrical connection.

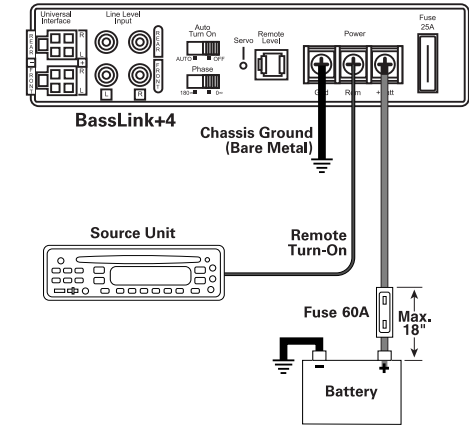


POWER CONNECTIONS

Make Power, Ground and Remote Turn-On connections as shown in Figure 7. Observe the following installation tips:

- Connect a short #8AWG GND wire from Basslink+4 to the nearest bare metal surface. Scrape away paint from the metal surface, if necessary, and use a screw with a (star) lock washer.
- Install a fuse holder with a 60A fuse within 18" of the battery + terminal (see Figure 7).
- Use #8 AWG wire for the +BATT (+12Vdc) and GND (ground) connections. If needed, use at least a #20 AWG wire for the REM (remote) connection.
- If you pass the power or remote wire through the vehicle's firewall or other metal obstruction, it must be insulated with a rubber grommet.
- If your head unit provides a remote turn-on lead, connect it to the REM terminal on BassLink+4. For speaker-level applications, a remote connection is not required, since BassLink+4's Auto Turn On feature will sense a signal on the speaker wires and turn on automatically.

Figure 7. Power connections for BassLink+4.



IMPORTANT: To enable BassLink+4's Auto Turn On feature, set AUTO TURN ON to the AUTO position (see Figure 12 on page 5).

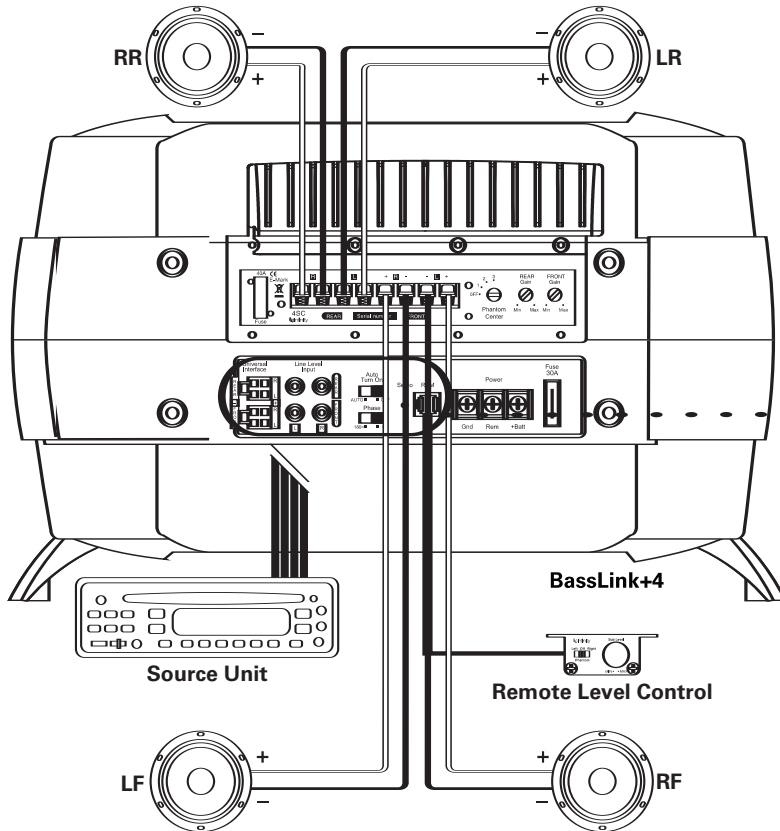
CONNECTIONS

Note: In order for the Phantom Center circuit to operate properly, the speakers and input wires **MUST** be connected in proper polarity!

SPEAKER CONNECTIONS

Connect the speakers to the FRONT and REAR screw terminals, observing proper polarity (Figure 8).

Figure 8. BassLink+4 audio connections.



INPUT CONNECTIONS

BassLink+4 is equipped with four line-level (RCA) inputs and four speaker-level inputs. Any combination of line-level and speaker-level inputs may be used to provide nonfading bass when connected to a head unit with four outputs. You must provide a full-range signal to all four input channels. Do not connect a subwoofer output to any of the inputs.

Connect the input signal wires according to Figures 8a through 8d.

If your source unit provides only speaker-level output wires, connect those wires to the Universal Interface connections as shown in Figures 8a or 8b.

If your source unit provides line-level outputs with RCA-type connectors, connect the signal cables to the FRONT and REAR LINE LEVEL inputs as shown in Figure 8c or 8d.

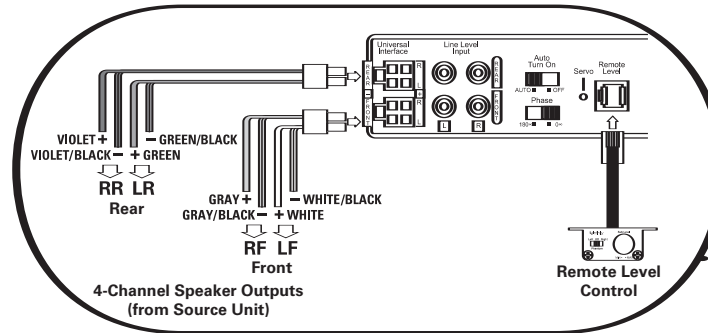


Figure 8a: Input connections for a radio with four speaker level outputs

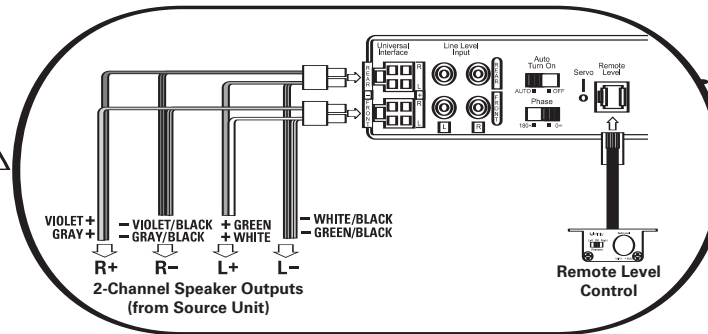


Figure 8b: Input connections for a radio with two speaker level outputs

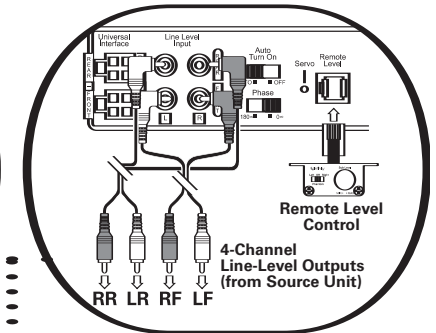


Figure 8c: Input connections for a radio with four RCA connections

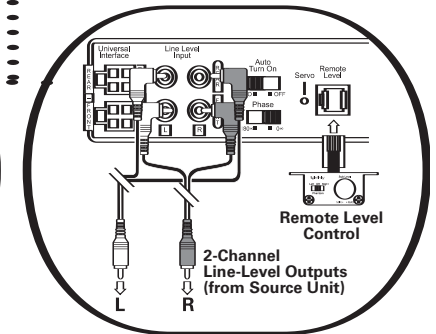
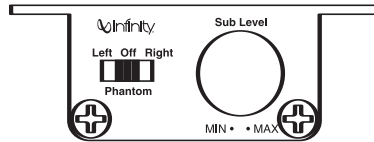


Figure 8d: Input connections for a radio with two RCA connections (use "y" adapters)

CONTROLS AND FUNCTIONS

REMOTE CONTROL

Figure 9. REMOTE LEVEL controls.



SUB LEVEL: Use this control to adjust the amount of bass to suit your preference.

PHANTOM CENTER:

LEFT: Slide the switch to this position to provide a phantom center for front left seating position.

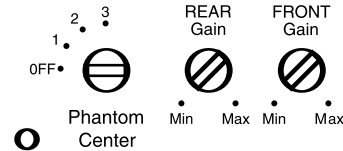
OFF: Slide the switch to this position to turn off Phantom Center processing.

RIGHT: Slide the switch to this position to provide a phantom center for front right seating position.

Note: Once you have chosen the best Phantom Center switch position and made the necessary adjustments to the Front Gain and Rear Gain controls and set the Subwoofer Level control and Phase switch, you won't need to make any further adjustments.

BASSLINK+4 SIDE-PANEL

Figure 10. BassLink+4 side-panel controls.

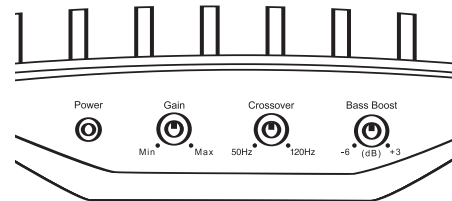


PHANTOM CENTER: Use this switch to select the proper adjustment of the Phantom Center circuit according to your car and your preference, using the setup CD.

FRONT/REAR GAIN: Use these to adjust the levels of the front and rear speakers.

POWER LED: This indicator will glow blue when BassLink+4 is operational.

Figure 11. BassLink+4 front-panel controls.



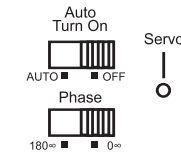
POWER LED: This indicator will glow blue when BassLink+4 is operational.

GAIN CONTROL: Use this control to adjust the relative volume (loudness) of BassLink+4's subwoofer with respect to the other speakers in the vehicle.

CROSSOVER: Use this control to adjust the amount of high-frequency information present in BassLink+4's subwoofer speaker.

BASS BOOST: Use this control to correct any perceived peak or dip in the bass response (typically around 40Hz in most vehicles). Set the control to any value between -6dB and +3dB, according to your preference.

Figure 12.



PHASE CONTROL: Use this switch to invert the phase of BassLink+4's subwoofer output.

AUTO TURN ON: For speaker-level connections, use this switch to activate (or deactivate) BassLink+4's automatic turn-on circuit.

SERVO LED: This indicator glows blue when the subwoofer is at maximum excursion and the amplifier is modifying the output to maintain maximum performance.

TUNING BASSLINK+4

SETTING THE FRONT SPEAKER AND SUBWOOFER LEVELS

Note: Refer to page 5, "Controls and Functions," for the location of controls.

1. Turn on the audio system and verify (using the Balance and Fader controls) that the speakers and input channels are connected properly – when the Balance control is turned to the left, only the left speakers should play, and when the control is turned to the right, only the right speakers should play. BassLink+4's subwoofer should play regardless of the Fader or Balance control's position.
2. Turn the Rear Gain (located on BassLink+4's end panel) and BassLink+4's subwoofer Gain control (located on BassLink+4's front panel) all the way down. Turn the Front Gain (located on the BassLink+4's end panel) to 1/4 volume. Only the front speakers should be playing. Additionally, turn BassLink+4's Crossover control and Bass Boost control to their midpoint positions and set BassLink+4's phase control to the 0° position.
3. Play a dynamic music track with substantial bass content – Track 5 or 9 on the Phantom Center Setup CD is suitable – and turn the source unit's volume control to 3/4 volume.
4. Turn the Front Gain control up until you hear slight distortion in the music (fuzzy or crackling sounds). Then reduce the Front Gain control slightly until the distortion is no longer present.
5. Turn the Sub Level control (on the remote level control) to its maximum output setting (fully clockwise).

6. While listening to the same track that you used in Step 3, turn BassLink+4's Gain control clockwise until the servo light (located on BassLink+4's end panel) begins to flash with each bass note but doesn't stay lit continuously.
7. While sitting in the driver's seat, listen to your system, making a mental note of the amount of upper bass being reproduced.
8. Switch the Phase control to the 180° position and listen again for upper bass content. There may be more upper bass, less upper bass or there may be no change. The position that provides the most upper bass is correct, but choose either setting according to your preference.
9. Adjust the Crossover control until you hear only low-frequency information coming from BassLink+4's woofer. You should use the highest (clockwise) position possible that doesn't allow any vocal information to be audible from BassLink+4's woofer (when you listen in the driver's position).
10. Adjust the Bass Boost control clockwise or counterclockwise to suit your preference.

ABOUT THE PHANTOM CENTER CIRCUIT

Note: In order for the Phantom Center to work properly, the front speakers MUST be connected in correct polarity. Additionally, some factory-installed audio systems use extensive and nondefeatable equalization and channel delay, which may diminish the effect of the Phantom Center circuit.

The Phantom Center circuit provides four tuning selections: Off, 1, 2 and 3. These settings process the audio signal differently and provide optimization for several different car sizes and front speaker mounting locations. The chart below indicates switch positions that will probably sound best for a variety of car sizes and speaker locations, but there is no correct setting. You should choose the one you like best.

	Midrange Speaker Location		
car size	doors	dash	kick panel
small	2	2 or 3	3
mid-size	1 or 2	2 or 3	3
large	1	2	2 or 3

Note: The Phantom Center circuit affects the midrange speaker only in switch position 1, but may affect the separate tweeter, as well, in switch positions 2 and 3, depending on the tweeter's cutoff frequency. If you have separate tweeters mounted in the tops of the doors or in the dashboard, and the chart indicates two possible switch positions, the second position may be the better choice.

Using the Phantom Center Setup CD, you'll listen to some instructions, a spoken setup track and several music selections to determine the best adjustment for your system. The first four tracks are spoken tracks, with Track 3 being the most important of those tracks. Portions of Track 3 have been recorded through the equivalent of the Phantom Center circuit. Listen to Track 3, "Spoken Setup Track", and choose the switch position that provides the best illusion of a person speaking halfway between the front speakers.

Track 3:
 0:00-0:10 Switch in the Off position
 0:11-0:21 Switch position 1
 0:22-0:33 Switch position 2
 0:34-0:47 Switch position 3
 0:48-0:60 Rapid switching between the three positions

Tracks 5 through 16 are music tracks. There are three excerpts of songs and each excerpt is recorded four times; once with no processing (switch in the Off position), once through switch position 1, once through switch position 2 and once through switch position 3. Using the music tracks, choose the switch position that distributes the sound best between the right and left speakers. You can use the following list of tracks as a guide.

PHANTOM CENTER SETUP CD

- Track 1 Introduction
- Track 2 Instructions for Track 3
- Track 3 Spoken Setup Track
- Track 4 Instructions for Music Tracks
- Track 5 Lonely Savior (no processing)
- Track 6 Lonely Savior (switch position 1)
- Track 7 Lonely Savior (switch position 2)
- Track 8 Lonely Savior (switch position 3)
- Track 9 Another Time, Another Place (no processing)
- Track 10 Another Time, Another Place (switch position 1)
- Track 11 Another Time, Another Place (switch position 2)
- Track 12 Another Time, Another Place (switch position 3)
- Track 13 Cinderella's Revelation (no processing)
- Track 14 Cinderella's Revelation (switch position 1)
- Track 15 Cinderella's Revelation (switch position 2)
- Track 16 Cinderella's Revelation (switch position 3)
- Track 17 Conclusion
- Track 18 Lonely Savior: Ken Birmingham
- Track 19 Another Time, Another Place: Mike Christian
- Track 20 Cinderella's Revelation: Joe Chinnici

TUNING BASSLINK+4 (CONT.)

SETTING THE PHANTOM CENTER CIRCUIT

1. Before you begin, set the Phantom switch on the remote control for the seat in which you are sitting. Set the Phantom Center switch on the BassLink+4 to the Off position. Turn the Rear Gain control on the BassLink+4 all the way down (counterclockwise) and make sure no sound is coming from the rear speakers.
2. Insert the Phantom Center Setup CD into your CD player.
3. Follow the spoken instructions on the setup CD.
4. Once you have chosen the switch position you like best using Tracks 1–17, stop the CD and move the Phantom Center switch on the BassLink+4 to the position you have chosen. You can use Track 17 and the music selections that follow (Tracks 18–20) to check your work.

ADDING THE SOUND FROM THE REAR SPEAKERS

With music playing, turn the Rear Gain control clockwise until sound from the rear speakers is clearly audible but not so loud that it makes the music seem to come from the back of the car.

TROUBLESHOOTING

-
- PROBLEM:**
Power LEDs are not lit.
CAUSES and SOLUTIONS:
 1. Poor or improper power connection. Check power, ground and remote connections. Check speaker level input for proper connections (see No Output).
 2. Blown or improperly installed fuse. Check main battery fuse and replace if necessary. Check fuses on BassLink+4.
-
- PROBLEM:**
Power LEDs are lit, but there is no sound from one or all speakers.
CAUSES and SOLUTIONS:
 1. Improper input signal connections. Check all input connections on BassLink+4 and source unit.
 2. Damaged speaker wire or improper speaker connections. Check speakers and wiring; change if necessary.
 3. Improper signal connections on BassLink+4. Check gray ribbon signal cable connection to BassLink+4 (see Figures 8a, 8b, 8c and 8d).
-
- PROBLEM:**
BassLink+4 sounds muddy or distorted.
CAUSES and SOLUTIONS:
 1. Gain is set too high and SERVO LED is lit constantly. Readjust GAIN control (see *Tuning BassLink+4* on page 6).
 2. Bass is set too high. Readjust BASS BOOST control (see *Tuning BassLink+4* on page 6).
 3. Head-unit output is distorted or blown. See your authorized Infinity car audio dealer.
-
- PROBLEM:**
No output from BassLink+4.
CAUSE and SOLUTION:
Input connections are improperly wired. Verify all connections (see Figures 8a, 8b, 8c and 8d).
-
- PROBLEM:**
No output from BassLink+4 when head-unit fader control is set to front or rear (in a 4-channel connection).
CAUSE and SOLUTION:
Input connections are improperly wired. Verify all connections (see *Power Connections*, on page 3).
-
- PROBLEM:**
BassLink+4 turns on before head unit is completely on and produces a “thump” sound.
CAUSE and SOLUTION:
For speaker-level connections, head unit is producing a false turn-on signal. On BassLink+4’s side panel, slide AUTO TURN ON to OFF. It will be necessary to connect the Remote lead to a switched ignition voltage source.
-
- PROBLEM:**
BassLink+4’s POWER LED remains on after head unit is turned off.
CAUSE and SOLUTION:
For speaker-level connections, this is normal operation when AUTO TURN ON is set to ON. BassLink+4 will remain on for another 5 to 10 minutes after sensing that audio signals are not present before shutting down.

SPECIFICATIONS

	BassLink+4™ Subwoofer
Amplifier Power:	250W RMS
Frequency Response:	20Hz to 120Hz
Fuse:	25A
Max. Current Draw:	26A
Idle Current Draw:	< 800mA
Input Sensitivity:	50mV to 4V Line-level input 1V to 16V universal interface
Crossover Frequency:	50Hz to 120Hz
Crossover Slope:	12dB per octave
Bass Boost:	-6dB to +3dB @ 40Hz
Dimensions (L x W x H):	15-1/16" x 8-3/4" x 15-5/16" (383mm x 223mm x 389mm)
Sub Level Control (with housing):	2-3/16" x 2-5/16" x 7/8" (56mm x 59mm x 23mm)
Sub Level Control (without housing):	2-3/16" x 1-5/16" x 3/4" (56mm x 34mm x 20mm)
	High-Frequency
Amplifier Power:	35W x 4 channels at 4 ohms 50W x 4 channels at 2 ohms
Frequency Response:	90Hz to 47kHz
Fuse:	30A
Max. Current Draw:	26A
Idle Current Draw:	<800mA
Input Sensitivity:	100mV to 6V line-level input 1V to 16V universal interface
Crossover Frequency:	Fixed 80Hz high-pass
Crossover Slope:	12dB per octave

A valid serial number is required for warranty coverage.

Features, specifications and appearance are subject to change without notice.
This product is designed for mobile applications and is not intended for connection to the mains.



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Declaration of Conformity



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72500 Château du Loir
France

declare in own responsibility that the product described in this owner's
manual is in compliance with technical standards:

EN 55013:2001+A1:2003
EN 55020:2002+A1:2003

Klaus Leberz
Harman Consumer Group International
Château du Loir, France 7/06

