

BassLink® 4sc

instructions



 Infinity®

BassLink® 4sc

INTRODUCTION

THANK YOU for choosing the Infinity® BassLink® 4sc amplifier expansion module for use with BassLink® II. To ensure optimum performance, we strongly recommend that installation be entrusted to a qualified professional. Although these instructions explain how to install the BassLink 4sc 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

4sc amplifier
Mounting screws (8-M3 x 14mm)
Spare fuse (30A)
Owner's manual
Infinity sticker
Warranty card

BASSLINK 4sc INSTALLATION

This owner's manual assumes BassLink II is installed in your vehicle. If you are installing both units simultaneously, refer to the BassLink II owner's manual for instructions regarding the mounting of BassLink II and the REMOTE LEVEL control, and to this owner's manual for tuning.

DESCRIPTION

The BassLink 4sc is a four-channel plug-and-play amplifier designed to make upgrading your system easy. The BassLink 4sc is designed to slide into an available slot in the BassLink II. The BassLink 4sc also includes a Phantom Center circuit, which creates the illusion of a center channel without requiring a center speaker.

INSTALLATION

1. Disconnect BassLink II's power connection from the battery.
2. Remove the wiring cover from BassLink II.
3. Remove, but do not discard, the eight screws that hold the AMPLIFIER DOCK cover panel in place (Figure 1).
4. Remove and discard the screw that attaches the two wiring harnesses and connectors to the dock cover.
5. Slide the 4sc amplifier partially into the opening and connect the wiring harness connectors to the appropriate connectors on the BassLink 4sc's circuit board (Figure 2).
6. Insert the amplifier and secure it using the eight screws that were removed in Step 3 (Figure 2). Extra screws have been included with the 4sc.
7. Upgrade the fuse at the vehicle's battery (installed with BassLink II) to a 50A fuse.
8. Reconnect battery power lead.

Figure 1.

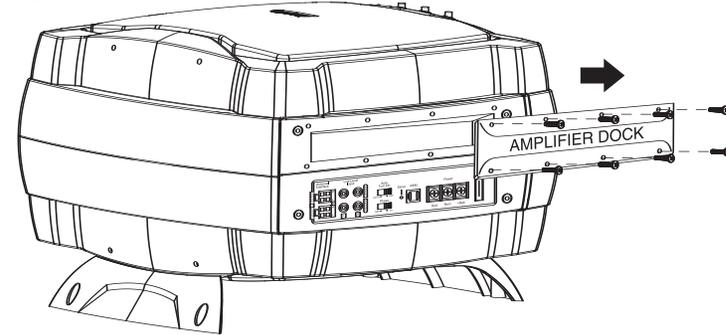
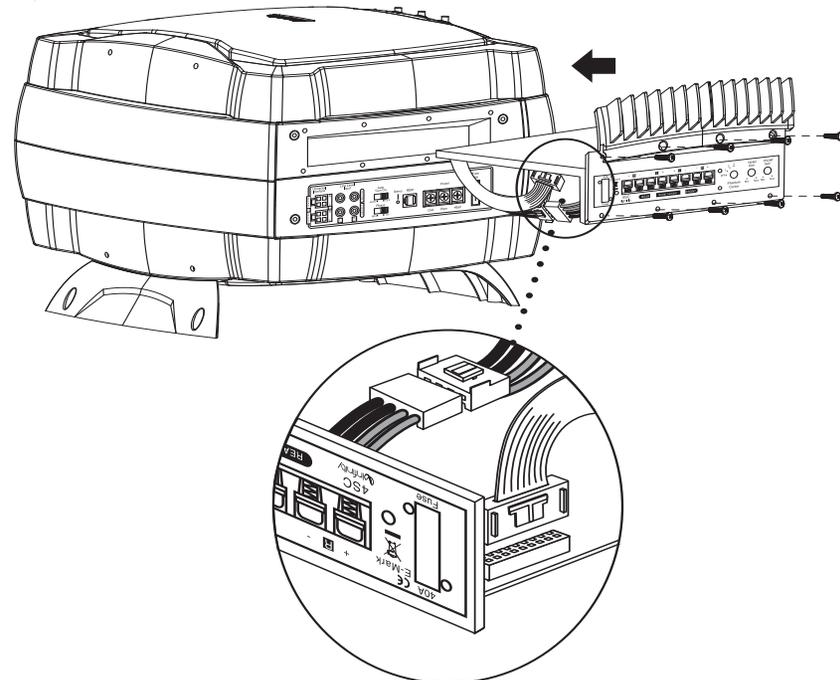


Figure 2.



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 3).

INPUT CONNECTIONS

You must connect full-range signal to all four inputs on BassLink II (if you are using the 4sc). Do not connect a subwoofer output to any of the inputs if you are using the 4sc.

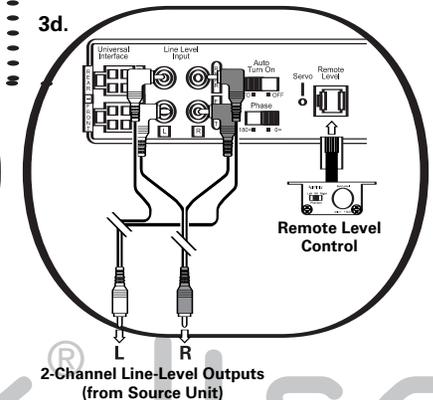
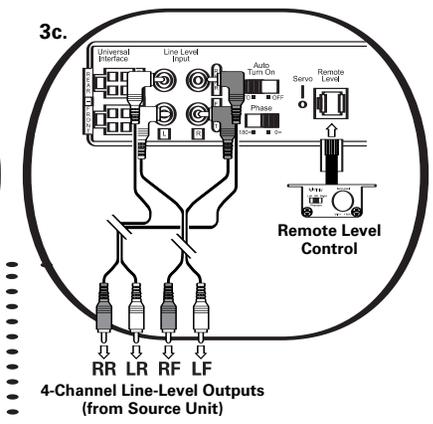
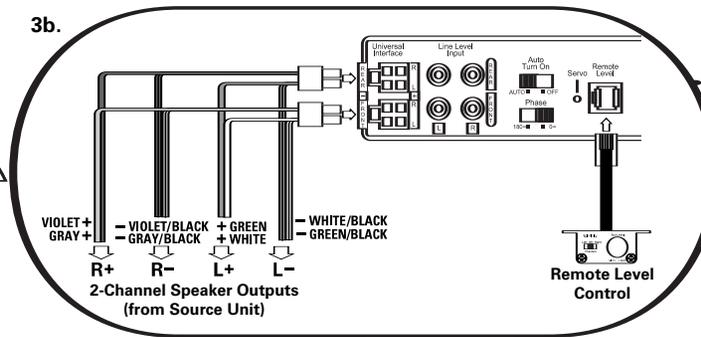
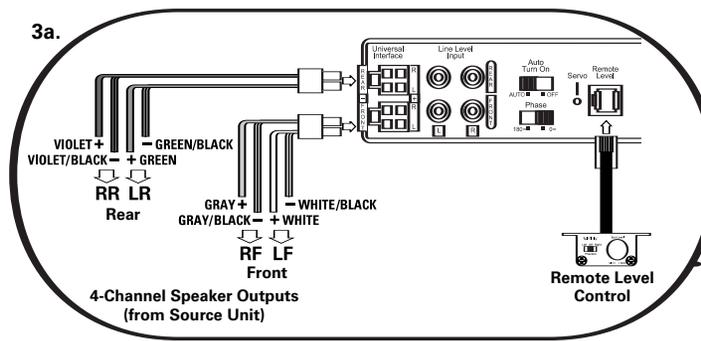
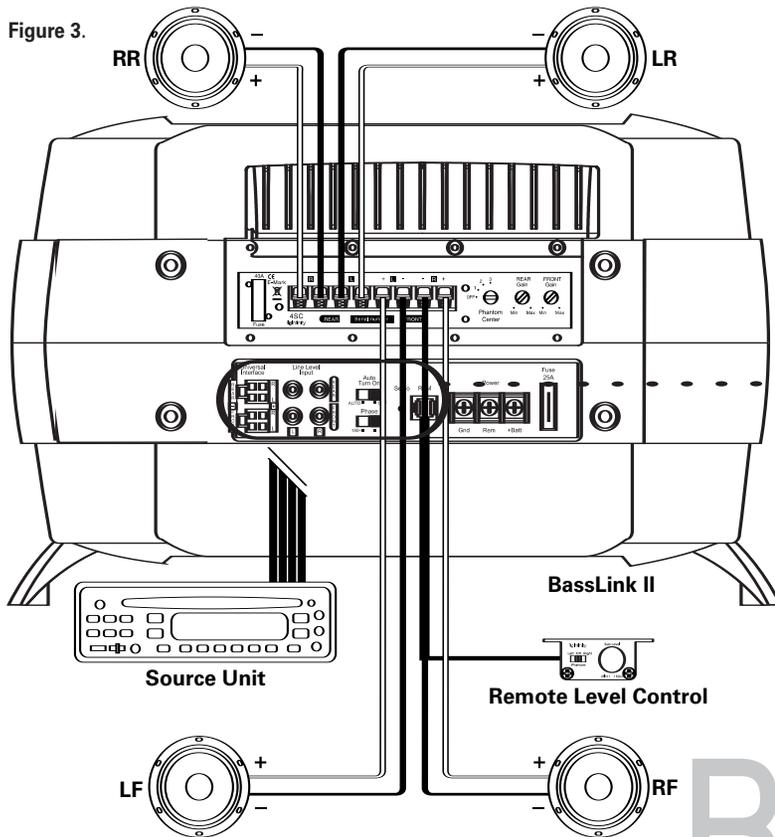
Connect the input signal wires according to Figures 3a through 3d.

If your source unit provides only speaker-level output wires, connect those wires to the Universal Interface connections as shown in Figures 3a or 3b.

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 3c or 3d.

Note: If your source unit provides two line-level outputs and two speaker-level outputs, you may connect the line-level output to the appropriate (front or rear) RCA-type input and the speaker-level outputs to the other (front or rear) Universal Interface connector.

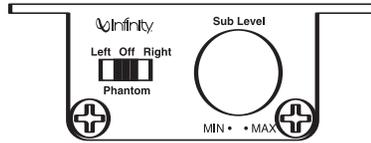
Figure 3.



CONTROLS AND FUNCTIONS

REMOTE CONTROL

Figure 4. 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.

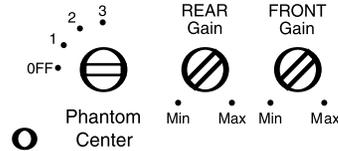
OFF: Slide the switch to this position to turn off Phantom Center processing.

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 on the BassLink II or the 4sc.

BASSLINK 4sc

Figure 5. BassLink 4sc controls.



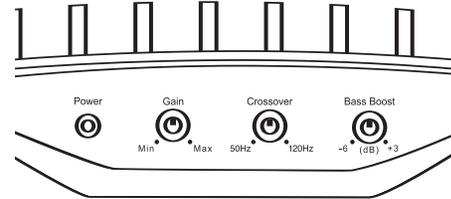
PHANTOM CENTER: Use this switch to select the proper adjustment of the Phantom Center circuit according to your car and your preference.

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

POWER LED: This indicator will glow blue when BassLink II and 4sc are operational.

BASSLINK II

Figure 6. BassLink II controls on the front panel.



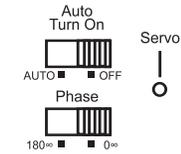
POWER LED: This indicator will glow blue when BassLink II is operational.

GAIN Control: Use this control to adjust the relative volume (loudness) of BassLink II with respect to the other speakers in the vehicle.

CROSSOVER: Use this control to adjust the amount of high-frequency information present in BassLink II's output.

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 7.



PHASE Control: Use this switch to reverse the phase of BassLink II's output with respect to its input.

AUTO TURN ON: For speaker-level connections, use this switch to activate (or deactivate) BassLink II'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.

For more information about using the controls, see "Tuning BassLink II and 4sc" on page 5.

TUNING BASSLINK II AND 4sc

SETTING THE FRONT SPEAKER AND SUBWOOFER LEVELS

Note: Refer to page 4, "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 II's subwoofer should play regardless of the Fader or Balance control's position.
2. Turn the Rear Gain (located on the 4sc's end panel) and BassLink II's Gain control (located on BassLink II's front panel) all the way down. Turn the Front Gain (located on the 4sc's end panel) to 1/4 volume. Only the front speakers should be playing. Additionally, turn BassLink II's Crossover control and Bass Boost control to their midpoint positions and set BassLink II'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 II's Gain control clockwise until the servo light (located on BassLink II'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 II's woofer. You should use the highest (clockwise) position possible that doesn't allow any vocal information to be audible from BassLink II'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 non-defeatable 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. The three 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 (included with your BassLink 4sc) 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

TUNING BASSLINK II AND 4sc (CONTINUED)

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

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 4sc in the Off position. Turn the Rear Gain control on the 4sc all the way down (counter-clockwise) 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 4sc 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:**
BassLink II and 4sc 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 fuse on BassLink II and 4sc.

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- **PROBLEM:**
4sc Power LED not lit but BassLink II Power LED is.

CAUSES and SOLUTIONS:

1. Improper power connection between BassLink 4sc and BassLink II. Check Power Connector (see *Installation*, Figure 2).
2. Improper signal connection between BassLink 4sc and BassLink II. Check gray ribbon signal cable connection to the 4sc (see *Installation*, Figure 2).
3. Blown or improperly installed BassLink 4sc fuse. Check fuse and replace if necessary.

- **PROBLEM:**
BassLink 4sc Power LED lit but no sound from one or all speakers.

CAUSES and SOLUTIONS:

1. Improper input signal connections. Check all input connections on BassLink II and source unit.
2. Damaged speaker wire or improper speaker connections. Check speakers and wiring; change if necessary.
3. Improper signal connections between BassLink 4sc and BassLink II. Check gray ribbon signal cable connection to 4sc (see *Installation*, Figure 2).

-
- **PROBLEM:**
Music sounds distorted.

CAUSES and SOLUTIONS:

1. Gain levels are set too high or head unit volume is too high. Reduce volume and/or Gain Levels.
2. Tone Controls on head unit misadjusted. Check controls and adjust as necessary.

- **PROBLEM:**
No output from BassLink 4sc and BassLink II.

CAUSES and SOLUTIONS:

Input connections are improperly wired. Verify all connections (see Figures 4 and 5).

- **PROBLEM:**
No output from BassLink II 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 *Connections*, on page 3).

-
- **PROBLEM:**
BassLink II 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 II'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 II's BassLink 4sc 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 II and BassLink 4sc will remain on for another 5 to 10 minutes after sensing that audio signals are not present before shutting down.

SPECIFICATIONS

BassLink 4sc

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.

This product is designed for mobile applications and is not intended for connection to the mains.

Features, specifications and appearance are subject to change without notice.

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Declaration of Conformity



We, Harman Consumer Group International
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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
Chateau du Loir, France 10/05

