**Thank you** for choosing the Infinity BassLink. BassLink has been designed to provide the kind of high-performance low-frequency reproduction 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 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. Unfinity

Remember to keep this manual and your sales receipt in a safe place for future reference.

# Munfinity ►BassLink

instructions

## INTRODUCTION

#### **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.

#### YOUR CAR AND BASS REPRODUCTION

Depending on the interior volume of your vehicle and the dimensions of the passenger compartment and cargo area, reproduced frequencies below 80Hz may be boosted by nearly 12dB per octave as frequency decreases. This effect, known as the vehicle's "transfer function" or "cabin gain," plays an important part in shaping the overall in-car response of the BassLink.

BassLink is designed to work with your vehicle's other speakers to reproduce frequencies below 100Hz. Moreover, depending on orientation and mounting location, BassLink may be "in phase" or "out of phase" with those speakers. The resulting conditions, known as constructive and destructive interference, also play a role in shaping the total frequency response of your system.

Fortunately, BassLink has controls to optimize both of these conditions and their adjustment is explained later in the manual.

## **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 must not interfere with the safe operation of the vehicle.

Figure 1. BassLink in a car's trunk.



#### Figure 2. BassLink in an SUV's cargo area.



## MOUNTING BASSLINK

**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.

Note: Each enclosed mounting foot has a captive nut for foot attachment to BassLink. Orient each foot so its nut faces BassLink's back. Enclosed bolts may then be passed through BassLink using front or top holes and fastened to the nuts in the back or bottom. See Figures 3 and 4 for details.

#### **VERTICAL MOUNTING**

Slide the two (black) vertical mounting feet over the bottom of BassLink until they snap into the indentations, as shown in Figure 3. Place BassLink (with its feet) so the controls face the trunk or cargo interior for easy adjustment. At each foot, insert a supplied bolt through holes and tighten with a screwdriver. Securely mount BassLink to the mounting surface with the four enclosed tapping screws.

Figure 3. Vertical mounting of BassLink.



#### **HORIZONTAL MOUNTING**

Slide the four (gray) horizontal mounting feet over the sides of BassLink until they snap into the indentations, as shown in Figure 4.

Place BassLink (with its feet) so controls face up for easy adjustment. At each foot, insert a supplied bolt through holes and tighten with a screwdriver. Securely mount BassLink to the mounting surface with the four enclosed tapping screws.

Figure 4. Horizontal mounting of BassLink.





## **Power Connections**

Connect power to BassLink, as shown in Figure 5. Also observe these installation tips:

- Use at least #12 AWG wire for the +BATT (+12 Vdc) and GND (ground) connections. If needed, use at least a #20 AWG wire for the REM (remote) connection.
- Route all power wires through a grommet in the vehicle's firewall. If a factory grommet is unavailable, install one.
- Connect a short GND wire from BassLink to the nearest bare metal surface. For a good connection, scrape away paint from the metal surface and use a screw with a lock (star) washer.

Figure 5. Power connections for BassLink.

- Install a fuse holder with a 20 A fuse within 18" of the battery + terminal (see Figure 5).
- The REM connection requires +5 to +12 Vdc signal for BassLink to turn on remotely. Most head units with preamp outputs provide this remote voltage signal. For speaker-level applications, a remote connection is not required, since BassLink's Auto Turn-On feature will sense voltage on the speaker wires to automatically turn on BassLink.

**IMPORTANT:** To enable BassLink's Auto Turn-On feature, set AUTO TURN-ON to the AUTO position (see Figure 12 on page 6).

## **A**PPLICATIONS

BassLink 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.

Figure 6. BassLink audio connections for a head unit with two line-level or subwoofer (RCA) outputs.

To help you plan your installation, we included five system applications in Figures 6 through 10 on pages 3 through 5. For more system ideas, see your authorized Infinity car audio dealer.

Note: The applications show the remote SUB LEVEL control which installs under the dashboard for easy in-car bass level adjustments (see page 7).





## **APPLICATIONS (CONTINUED)**





## **APPLICATIONS (CONTINUED)**



## **C**ONTROLS AND **F**UNCTIONS

BassLink provides several controls and indicators that simplify sonic integration with virtually any vehicle's unique acoustic properties. They are located on the front and side panels, as shown in Figures 11 and 12.

#### Figure 11. BassLink controls on the front panel.



**POWER LED:** This indicator will glow red when BassLink is operational.

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

**CROSSOVER:** Use this control to adjust the amount of high-frequency information present in BassLink's output. A lower value means more of the high frequencies are filtered out.

**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 what sounds best.

## Figure 12. BassLink controls on right-side panel.



**PHASE Control**: Use this switch to reverse the phase of BassLink's output with respect to its input. Choose the position (0° or 180°) that sounds the best.

Note: Depending on BassLink's orientation and location in a vehicle, reversing the phase may (or may not) increase or decrease the amount of upper bass being reproduced.

AUTO TURN-ON: For speaker-level connections, use this switch to activate (or deactivate) BassLink's automatic turn-on circuit. For most speaker-level applications, slide the switch to AUTO. However, if your system produces false turn-on signals or uses a remote (REM) connection, slide the switch to OFF.

**REMOTE GAIN CONTROL:** Use this RJ11 jack to connect the remote SUB LEVEL control (see page 7).

**SERVO LED:** This indicator glows green when the subwoofer is at maximum excursion and the amplifier is modifying the output to maintain maximum performance. Be sure to monitor this indicator during BassLink setup (see *Tuning BassLink*). When properly tuned, the SERVO LED should light momentarily during high-level bass transients. Avoid adjustments that cause the LED to remain lit for extended periods.

## TUNING BASSLINK

- 1. Unplug the RJ11 cable that connects the remote level control to BassLink.
- 2. Make sure the head unit is off and its volume control is set to minimum.
- 3. On BassLink's front panel, initially set all controls to their midpoint positions, as shown in Figure 11. On BassLink's side panel, initially set PHASE to 0°, as shown in Figure 12.
- Turn on the head unit and play a favorite music track that has substantial bass. Set the head unit's volume control to 75 percent of the total output (approximately 3 o'clock on rotary controls).
- Adjust the GAIN control clockwise until the SERVO LED (on BassLink's side panel) begins to flash with each bass note but doesn't stay lit continuously.
- Listen to your system, making a mental note of the amount of upper bass being reproduced.
- 7. Switch the PHASE control to 180° and listen again for upper bass content. There may be more upper bass, less upper bass, or no change at all. The position that provides the most upper bass is correct, but choose either setting according to your taste.

- Adjust the CROSSOVER control clockwise or counterclockwise until you hear only lowfrequency information. For example, you should NOT hear any vocals coming from BassLink when seated in the normal listening position.
- 9. Adjust the BASS-BOOST control clockwise or counterclockwise to suit your taste.
- 10. Recheck the SERVO LED to make sure it's flashing in time with the bass but is not lit continuously. If it is lit continuously, adjust the GAIN control counterclockwise until the SERVO LED only flashes.
- 11. Reconnect the RJ11 cable between the remote level control and BassLink. You may then use the remote level control to adjust the level of the bass to suit your taste and/or different program material.

Note: In most cases, the above steps will provide satisfactory tuning. However, the actual process may require several readjustments of each control, since the settings will interact with each other. If necessary, consult your authorized Infinity car audio dealer for help in tuning your system.

## **N**Infinity

## **CONNECTING THE SUB LEVEL CONTROL** TO BASSLINK

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 and the receptacle on the Sub Level Control (Figure 15).

Figure 15. Sub Level Control electrical connection.

## INSTALLATION

The Sub Level Control may be mounted under the dash or may be dismantled and mounted in the dash for a factory appearance.

### **UNDER-DASH MOUNTING**

Select a mounting location that allows easy access to the control while driving. Using the Sub Level Control as a template, mark and drill holes in the mounting surface. Attach the Sub Level Control using the mounting screws provided (Figure 13).

## **IN-DASH MOUNTING**

Disassemble the Sub Level Control by removing the two Phillips-head screws on the front panel, rear panel and on top. Remove the Sub Level Control's bottom and side panels. Slide the Sub Level Control's PC board forward to release the RJ11 connector from the back panel and remove the board along with the potentiometer, knob and connector as a single assembly.

Figure 13. Under-dash mounting of the Sub Level

Choose a mounting location that allows easy access to the control, and provides 1-3/4" clearance behind the mounting surface. Drill a 9/32" hole in the mounting surface. Feed the Sub Level Control's potentiometer (with the knob removed) through the hole and use the nut provided to hold the control in place (Figure 14).

Figure 14. In-dash mounting of the Sub Level Control.

#### Control Control. Cable Socket TEL . for Control **Rear View** Cable of Level Control **Circuit Board** Level Control Washer Circuit Board FRONT REAR Hex Nut LINE LEVEL INDUT DOWE Knob REAR UNIVERSAL INTERFACE - RIGHT + FRONT] SERVO O

**BassLink Connector Panel** 

## TROUBLESHOOTING

PROBLEM:
POWER LED not lit.

#### CAUSES and SOLUTIONS:

- 1. Fuse is blown and needs replacement.
- 2. Head unit not functioning properly. Check remote voltage, and power, ground or remote connections.

## • PROBLEM:

POWER LED is lit but there is no bass.

#### CAUSES and SOLUTIONS:

- 1. Inputs are not connected. Check connections.
- 2. Head-unit fader control is not set properly. Adjust head-unit fader control to feed audio signals to BassLink.

## • PROBLEM:

BassLink sounds muddy or distorted.

### CAUSES and SOLUTIONS:

- Gain is set too high and SERVO LED is lit constantly. Readjust GAIN control (see *Tuning BassLink* on the previous page).
- 2. Bass is set too high. Readjust BASS BOOST control (see *Tuning BassLink* on the previous page).
- 3. Head-unit output is distorted or blown. See your authorized Infinity car audio dealer.

PROBLEM:

No output from BassLink when head-unit fader control set to front or rear (in a 4-channel connection).

CAUSE and SOLUTION:

Input connections are improperly wired. Verify all connections (see *Applications* starting on page 3).

#### • PROBLEM:

BassLink 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's side panel, slide AUTOTURN-ON to OFF.

#### • PROBLEM:

BassLink'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 will remain on another 5 to 10 minutes after sensing that audio signals are not present before shutting down.

## **S**PECIFICATIONS

Amplifier Power:	200 W <sub>rms</sub>
Frequency Response:	20Hz to 120Hz
Fuse:	20A
Max. Current Draw:	12A
Idle Current Draw:	< 800mA
Input Sensitivity:	50mV to 4V Line-Level Input
	1V to 16V Universal Interface
<b>Crossover Frequency:</b>	50Hz to 120Hz
Crossover Slope:	12dB per octave
Bass Boost:	-6dB to +3dB @ 40Hz
<b>Dimensions (L x W x H):</b> BassLink:	14-1/2" x 12-1/2" x 8-1/2" (369mm x 318mm x 216mm)
Sub Level Control: (with housing)	2-3/16" x 2-5/16" x 7/8" (56mm x 59mm x 23mm)
Sub Level Control:	2-3/16" x 1-5/16" x 3/4"

(without housing) (56mm x 34mm x 20mm)



