

 **Klipsch**<sup>®</sup> CRT  
A LEGEND IN SOUND.

Klipsch Synergy Series™



KSW 50™

KSW 100™

KSW 150™

KSW 200™

KSW 300™

**Owner's Manual  
& Warranty**

## **SAFETY WARNINGS**

- Do not make connections (other than the power cord of a powered subwoofer) directly to any AC electrical wall outlet. Connection should be made only to an audio amplifier or equivalent component and only as described in the "Subwoofer Installation" section.
- Do not operate the subwoofer under extremely humid or adverse temperature conditions.
- Regardless of your amplifier's rated capacity, do not operate the speakers at the full output (highest volume): Amplifiers can create extremely high levels of distortion when operated at full output and such distortion may damage your loudspeakers.
- Position speaker connection wires so that they do not create a hazard.

## Dear Klipsch Synergy Series Owner:

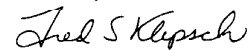
Congratulations on your purchase of a Klipsch Synergy Series powered subwoofer! Our third generation KSW powered subwoofers will add an exciting new dimension to your home entertainment system, providing outstanding bass reproduction of your favorite music and movies. The KSW models provide more powerful amplifiers, all-new driver designs and greater ease of use, making them an incredible value.

A Klipsch KSW subwoofer brings that "I'm part of the action" feeling to your home entertainment system in a way few other components can. If this is your first Klipsch purchase, welcome to the fold, if this is an additional Klipsch purchase, we thank you for your loyalty. When it comes to the best in home entertainment, Klipsch is a sound choice.

Please take the time to fill out the enclosed questionnaire and warranty registration card. This information helps us serve you better and assists our dealers in meeting your needs as a valued Klipsch customer. Should you have any questions or need more information on Synergy or other Klipsch products, please contact us. We will be happy to assist you, and we welcome your feedback.

Thank you for choosing Klipsch loudspeakers.

Sincerely,



Fred S. Klipsch  
Chairman & CEO

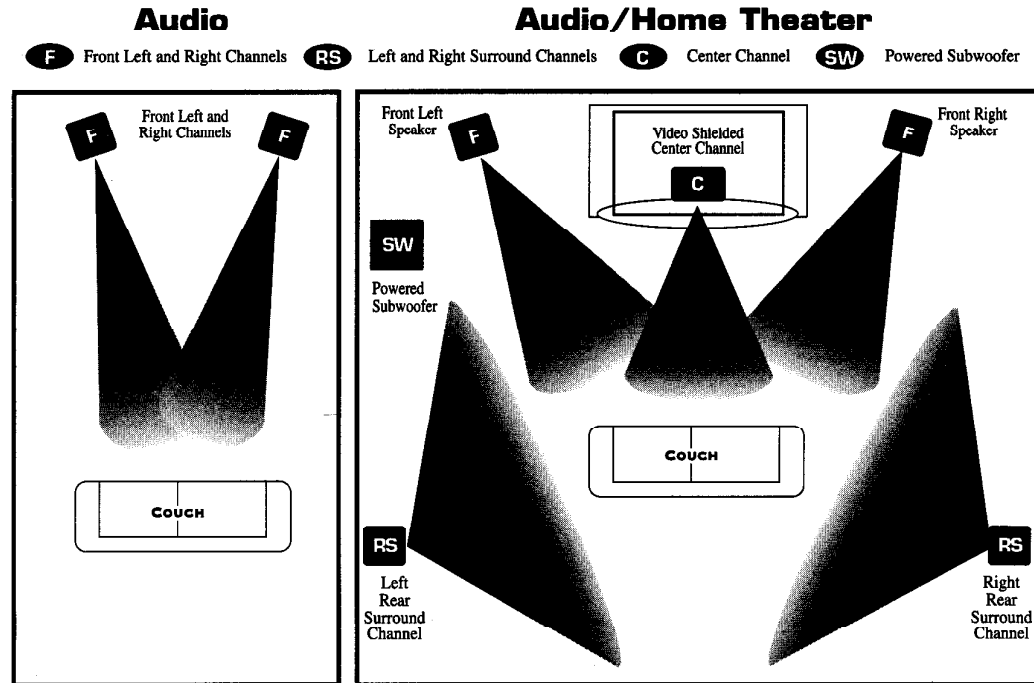
### **We Want Your Klipsch Product to Look and Sound as Good as When it Left the Factory. Please Check Promptly for Transit Damage.**

Each Klipsch product is individually tested for sonic quality and inspected for superior appearance before it leaves the Hope, Arkansas factory. Your loudspeaker left the factory in perfect condition in packaging carefully engineered to protect both the working parts and finish. However, in certain extreme circumstances, the products may be damaged in transit.

To ensure that your loudspeaker is in its original condition, please inspect it immediately. If any damage is discovered, notify the transportation company responsible for safe delivery. Make a request for inspection and hold the product in its original shipping carton for the inspector. After a joint inspection report is made, file a claim with the transportation company.

# Planning Your Klipsch Home Entertainment System

Your new Klipsch subwoofer will enhance the performance of your home entertainment system, whether used within a two-channel audio or multi-channel home theater system. Speaker placement is important in optimizing the performance of your system. Please refer to the diagrams below as a general guide for how to position the speakers within your listening area.



## Subwoofer Placement

Your Klipsch subwoofer is designed to operate at frequencies below 120 Hz. As frequencies in this range are essentially omnidirectional (difficult to localize), there may be several options for the placement of your subwoofer. The position of the subwoofer in the room will effect its frequency response and a minor change in position will result in an audible difference.

A general rule of thumb is to place your subwoofer in the vicinity of the speakers with which it is being paired. For example, a subwoofer reproducing main left and right channel bass would normally be placed in the same end of the room as the main speakers. This could mean along the front wall, in a front corner or along a side wall. A subwoofer connected to the surround channel (of a 5.1 type system) to compliment the bass of rear channel speakers performs best when positioned near the back wall or in a back corner.

For maximum output, place your subwoofer in or near a corner. This improves the loading of the subwoofer, increasing its efficiency and improving the output and dynamic range capabilities. Room acoustics and personal taste may dictate placing the subwoofer in a location other than a corner. Asymmetrical placement of two subwoofers in a room may improve low frequency reproduction by providing a smoother and more consistent response pattern. Placing two subwoofers in the same location or corner will provide the greatest output. This configuration can yield another 6 dB of output (equivalent to quadrupling the size of the subwoofer's amplifier power). Since low frequencies are heavily influenced by room size and dimensional ratios, experiment with the placement of your subwoofer.



## How to Connect Your KSW Series Subwoofer

The subwoofer should be unplugged from the AC power with the power switch in the OFF position during hook up and installation.

### AC Power

A detachable AC power cord is supplied with your KSW Series subwoofer. Install the female end into the recessed socket on the right-hand side of the amplifier panel. Refer to Figures B, C and D (pages 8 and 9). To eliminate a tripping hazard, this cord and all other connections should be unplugged from the back panel of the subwoofer if it is being moved. **Note: The 230 volt KSW 300 and dual voltage KSW 50, 100, 150 and 200 export versions are not supplied with an AC power cord. The 120 volt KSW 50 has a non-removable AC power cord.**

Since your KSW subwoofer has an internal power amplifier, it must be plugged into a nearby AC wall outlet. A three-prong grounded outlet is recommended wherever possible. **Note: Avoid extremely long extension cords of small gauge since they can reduce the amount of current available to the subwoofer amplifier, degrading its performance and presenting a potential fire hazard.**

### Types of Connections

Your subwoofer may be installed using either the "HI LEVEL" or "LINE" connections, but not both. With both types of connections, your main speakers can be run **full range** or **high pass filtered** (bass frequencies removed). Your main speakers can be bass filtered by your KSW Series subwoofer if connected in a specific manner. Refer to Figures B and C (pages 8 and 9) and the "HI LEVEL OUT," "LINE OUT," "LOW PASS" and "HIGH PASS" sections for more detail. The type of input and connection scheme depends upon the capabilities of your equipment and your performance goals.

### HI LEVEL

"HI LEVEL" (speaker level) connections are the best choice when connecting to a receiver or integrated amplifier that lacks a line level subwoofer jack or pre-amp output jacks. Refer to Figures A and B (page 8).

### LINE IN

"LINE IN" (line level) connections are often the best choice when connecting the subwoofer to a system comprised of a separate pre-amp and power amplifier. This also applies to any receiver or integrated amplifier that possesses line level **main** channel pre-amp outputs or a subwoofer output. Refer to Figures C and D (page 9).

### HI LEVEL SPEAKER WIRE CONNECTIONS

#### About Speaker Wire Connections

When making any type of speaker wire connection be sure to observe proper polarity. Most speaker wire is color-coded or has some distinguishing feature differentiating the two conductors. Speaker wire connectors on most loudspeakers and amplifiers are also color-coded. Typically, RED is positive (+) and BLACK is negative (-), or ground. It does not matter which wire conductor is connected to the positive or negative connection of your equipment as long as you are consistent. Be sure that the connections from the amp to the speaker on all of the various channels of your system are connected in a like manner. Be careful not to have excess bare wire or loose strands of wire that could short from positive to negative as this could damage your speakers and amplifier.

### HI LEVEL IN

The "HI LEVEL IN" connections are hooked up to the **main** or **front** right and left speaker outputs of your amplifier. Use the same high quality speaker cable that you would run to your main speakers (consult your Klipsch dealer for recommendations). Be sure to observe proper polarity (+ to + and - to -) when making connections between the subwoofer and main amplifier. If the polarity of one of these wires is reversed, the output of the subwoofer will be diminished. Refer to the "About Speaker Wire Connections" section and Figures A and B (page 8).

For parallel connection of subwoofer and main speaker wires (main speakers full range), connect the subwoofer wires to the secondary set of speaker terminals (speaker B) if your amplifier is so equipped. If you use your speaker **B** terminals, they must be internally wired in parallel with the speaker **A** terminals or you'll notice a dramatic drop in the volume level of your main speakers. If this occurs, connect your subwoofer wires to the same amplifier speaker terminals that are being used to drive your main speakers (parallel connection). Refer to Figure A (page 8).

If your amplifier is not compatible with low impedance speakers, this type of parallel connection should not cause any operational problems. The input impedance of the KSW subwoofer's "**HIGH LEVEL**" inputs is a very high 510 ohms. Because of this, your amplifier will primarily see the impedance load of your main speakers. Please consult your dealer for details regarding connection of multiple speaker cables to the speaker outputs of your specific amplifier.

#### **HI LEVEL OUT**

If a limited range signal (bass filtered) is to be sent to your main speakers, connect them to the "**HI LEVEL OUT**" terminals instead of the **main** or **front** channel speaker terminals of your amplifier. Refer to Figure B (page 8). The high pass filter on these outputs will filter out bass frequencies below 100 Hz from your main speakers (120 Hz, KSW 50). Also refer to the "**LOW PASS**" section for more detail. **Do not** connect the **HI LEVEL** inputs of another subwoofer to these outputs as they are high pass filtered (bass frequencies removed).

#### **LINE LEVEL CONNECTIONS**

The KSW subwoofers are equipped with two types of line level connections. They are labeled: "**LINE IN**" / "**LINE OUT**" and "**SUB**" (KSW 300, "**LFE IN**"). The KSW 50 is equipped with "**LINE IN**" / "**LINE OUT**" connections only. These connections should be made using **high quality shielded** interconnect cables terminated with RCA phono plugs (consult your Klipsch dealer for recommendations). Refer to Figures C and D (page 9).

**LINE IN** jacks should be connected to a non-filtered, full-range subwoofer or pre-amp output on your receiver or pre-amp/processor. This signal contains the normal bass information present in the main **left** and **right** channels. When connecting to a component that has only a single pair of pre-amp outputs, "Y" adapters (splitters) may be used to feed a signal to both the subwoofer and the power amplifier. Refer to Figure D (page 9).

If your electronics provide you with a mono subwoofer output and you will not be connecting an LFE channel, you can use the "**LFE IN**" / "**SUB**" jack and a single interconnect cable to connect to the subwoofer. Note: Since the KSW 50 lacks a "**LFE IN**" / "**SUB**" jack, you can connect the mono subwoofer output jack on your electronics to either the left or right channel "**LINE IN**" inputs. However, there is a significant (6 dB) increase in subwoofer volume if a "Y" adapter is added to the mono subwoofer output of your electronics and both the left and right "**LINE IN**" jacks are fed a signal. This also applies to all other KSW models. **These types of hookups will provide a full-range signal to the main speakers.** Refer to the "**LOW PASS CONTROL**" section for more detail.

#### **LINE OUT**

If a **limited range** (bass filtered) signal is to be sent to your main speakers, connect the "**LINE OUT**" jacks to the inputs on the **main** or **front** channels of your power amp, receiver or integrated amplifier. These outputs will remove frequencies below 40 or 80 Hz (120 Hz, KSW 50) from your main speakers depending upon the setting of the "**HIGH PASS**" switch. Refer to Figure C (page 9).

The "**LFE IN**" / "**SUB**" jack (except KSW 50) is typically used with the newest 5.1 (six channel) surround sound systems (Dolby Digital® and DTS®). It is a discrete, low frequency effects channel with different signal content than the bass frequencies present in other channels. The information in this channel can be up to 10 decibels louder than the bass signals in other channels, so caution should be exercised when initially adjusting the subwoofer's level control. The "**LFE IN**" / "**SUB**" input and "**LINE IN**" inputs are summed together so both connections may be used concurrently if your electronics provide you with both outputs. Refer to Figures B, C and D (pages 8 and 9).

A combination of "HI LEVEL" and "LFE IN"/"SUB" inputs may be used. For example, if you connect your KSW subwoofer to electronics possessing an LFE output, you could use a speaker cable to connect to the "HI LEVEL IN" speaker wire terminals and a shielded interconnect cable to connect to the "LFE IN"/"SUB" input. Refer to Figure B (page 8).



**CAUTION: DO NOT USE THE "LINE IN" AND "HI LEVEL" INPUTS SIMULTANEOUSLY! "LFE IN"/"SUB" INPUTS MAY BE USED IN COMBINATION WITH THE "HI LEVEL" INPUTS.**

## Operating Controls

### LOW PASS CONTROL

The "LOW PASS" control is a variable filter that controls the upper frequency limit of the subwoofer. The filter is continuously variable from 40 to 120 Hz (40 to 140 Hz, KSW 50). Proper adjustment of this control helps smooth the transition in the bass frequencies between your main speakers and the subwoofer.

In situations where the main speakers are being sent a high pass filtered signal (bass frequencies removed), the subwoofer's low pass control should initially be set near the frequency where your main speakers are being filtered. If this filtering is being performed via "HI LEVEL" connections, the control should initially be set near 100 Hz (140 Hz, KSW 50). Refer to Figure B (page 8). With **line level** connections, the control's initial setting should be either 80 or 40 Hz (140 Hz, KSW 50) depending on the setting of the "HIGH PASS" switch. Refer to Figure C (page 9). If your main speakers are being high pass filtered with an external filter, the "LOW PASS" control on the subwoofer should initially be set near the frequency of this filter.

The Klipsch subwoofer's high pass filter has a gentle cutoff so there is still some audible signal content in your main speakers below the high pass filter's frequency. Because of this, the "LOW PASS" control's setting will often be somewhat below the high pass filter frequency. Conversely the acoustical characteristics of your room may dictate a setting slightly higher than the high pass filter frequency. In light of this, experiment with various settings. Refer to the "HIGH PASS" section for more detail.

The goal is to avoid setting the filter at too high a frequency, causing an overlap with the lower frequency range of your main speakers. This can create excess bass energy which may result in muddy and indistinct low frequencies. Setting the "LOW PASS" control at too low a frequency may cause the output of the subwoofer to sound disconnected from the upper bass being reproduced by the main speakers. This creates a dip in the bass response since neither speaker is covering this band of frequencies.

In some cases, you may elect to feed your main speakers a full range signal. In these situations the "LOW PASS" control should be set near the low frequency limit of your main speakers. In all cases, experiment due to variability in speaker placement, room acoustics and associated equipment. Refer to Figures A and D (pages 8 and 9).

### LEVEL

The "LEVEL" control adjusts the volume of the subwoofer relative to your main speakers. It adjusts the amount of bass output to compensate for room acoustics and personal taste. This control effects the signals that are connected to the "LINE IN" jacks, the "LFE IN"/"SUB" jack and the "HI LEVEL" binding posts. It does not effect the volume level of your main speakers.

Suggested control position for initial setup: 10 to 12 o'clock with the "AV BOOST/+3 dB" switch at 0 dB.

### PHASE

The "PHASE" switch is used to reverse the polarity (phase) of the subwoofer relative to your main speakers. It should initially be set to the 0° position to begin the setup procedure. In your listening chair, audition a recording with a prominent, repetitive bass line. Set the switch to the 180° setting and listen again to the same recording. Use the setting that yields the greatest amount of bass. The proper setting of this control is effected by room acoustics and the placement of the subwoofer in the room: You may need to repeat this procedure if the subwoofer is repositioned.

## HIGH PASS

This switch selects either "40 Hz" or "80 Hz" as the high pass filter frequency for your main speakers when your system is connected as per figure C (page 9). This diagram shows a separate pre-amp and power amp, but also applies to integrated components (such as receivers) possessing pre-amp output and power amp input jacks. The high pass frequency is the point below which sound will be filtered out. Typically the higher "80 Hz" setting would be used for smaller bookshelf speakers to relieve them of the strain of having to reproduce the deep bass frequencies. Larger floorstanding speakers are better able to handle bass energy and usually only need reinforcement at the lowest frequencies. Because of this, the "40 Hz" setting is typically selected for larger speakers. **Note: The 140 Hz "HIGH PASS" filter frequency is not adjustable on the KSW 50.**

## AV +3 dB/AV Boost

The "+3 dB" setting of this switch increases the volume of the subwoofer by three decibels above the volume set by the "LEVEL" control. This allows for two repeatable volume settings if you desire a different amount of bass for music recordings and movies soundtracks. The "+3 dB" setting should not be used when the "LEVEL" control is adjusted to a high volume. This avoids overdriving or distorting the subwoofer. This is not applicable for the KSW 50.

## POWER

When the "POWER" switch is in the "AUTO" position, the subwoofer will turn itself on when it receives a signal from your system. If no signal is sent for a period of 15 minutes (4.5 minutes, KSW 50), the sub will turn itself off. A red power light indicates a standby mode in which the amplifier will turn on when it senses a signal. Green indicates the subwoofer is on and receiving a signal. **Note: The KSW 50 has a single red color power light that lights only when the subwoofer is receiving a signal.**

## Troubleshooting

- If your subwoofer has little or no output:
  - Double check your power (AC) and system connections.
  - Make sure that the "LEVEL" control is turned up.
  - Make sure that the "POWER" switch on the rear control panel is in the "ON" or "AUTO" position.
  - Check that the "POWER" light on the rear control panel is lit (KSW 50 lights only when a signal is present). If it is not, check the AC fuse. When changing the AC main's power fuse, **unplug the power cord first.** To access the fuse, use the appropriate screwdriver to unscrew the flush cap on the fuse receptacle. If the fuse is blown (the filament inside the glass tube is burned through), replace it with the same type and value printed on the amplifier panel next to the fuse holder (or refer to the chart below). If the fuse blows again when the subwoofer is powered up, return the unit to your authorized Klipsch dealer for servicing by qualified personnel.

### Fuse types and values:

#### 120 Volt Versions (Slow Blow Type)

KSW 50	2A / 250V
KSW 100	2.5A / 250V
KSW 150	3.15A / 250V
KSW 200	5A / 250V
KSW 300	5A / 250V

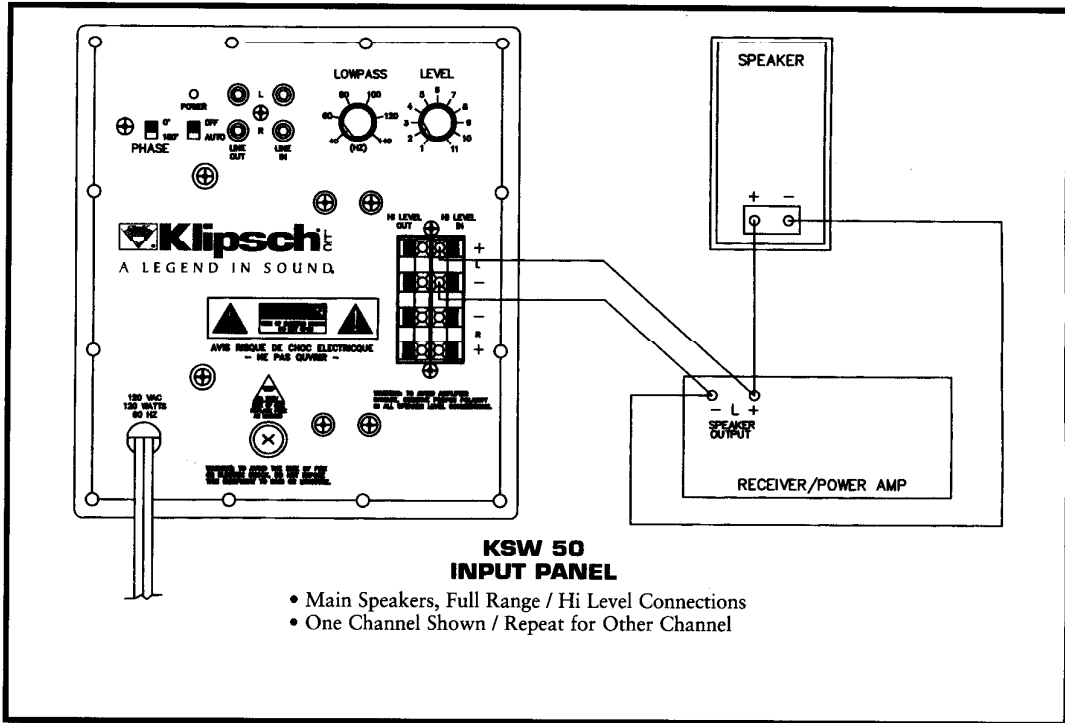
#### Export Dual Voltage and 230 Volt Versions (T Designator on Fuse)

KSW 50DV	T1A / 250V
KSW 100DV	T1.25A / 250V
KSW 150DV	T1.6A / 250V
KSW 200DV	T2.5A / 250V
KSW 300 230V	T3.15A / 250V

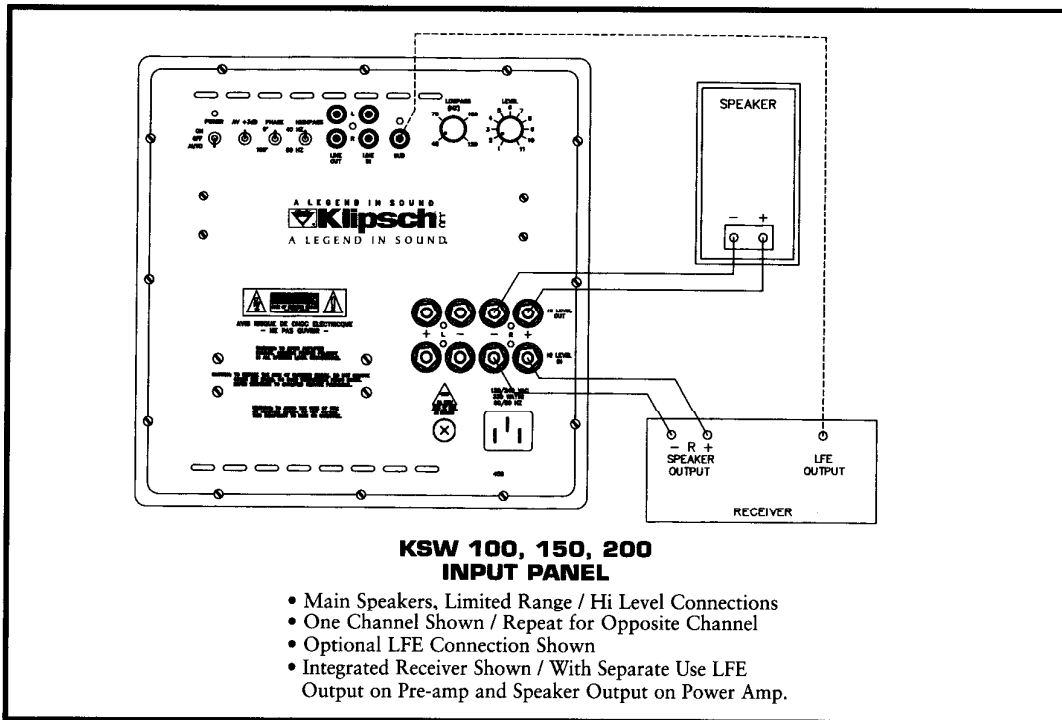


- All KSW powered subwoofer amplifiers are protected by a thermal sensor. If they run for extended periods beyond their designated power rating, the thermal sensor will engage and shut down the subwoofer. If this occurs, turn the "**POWER**" switch off, reduce the volume level on your electronics and wait five minutes before restarting the system.
- If the "**HI LEVEL**" connections are in use, a polarity reversal of one of the speaker wires coming from your amplifier will result in diminished output from the subwoofer.
- If you experience a noticeable hum when the subwoofer is connected to your system, try installing a three-to-two prong AC adapter on the subwoofer's power cord. If the hum persists and your audio system is connected to your video equipment, which in turn is connected to a cable television line, disconnect the cable line from the video equipment. If the hum disappears, consult your Klipsch dealer for a ground isolator for the cable line.
- If you connect the subwoofer to a second set of speaker terminals (i.e. speaker B), and there is a dramatic loss of volume from your main speakers, the two sets of main speaker terminals on your receiver are wired in series. In this case, another type of hookup should be attempted, such as hooking the subwoofer to the same terminals as your main speakers or using line level connections as per Figure D (page 9). If you are still experiencing difficulties, consult your authorized Klipsch dealer.

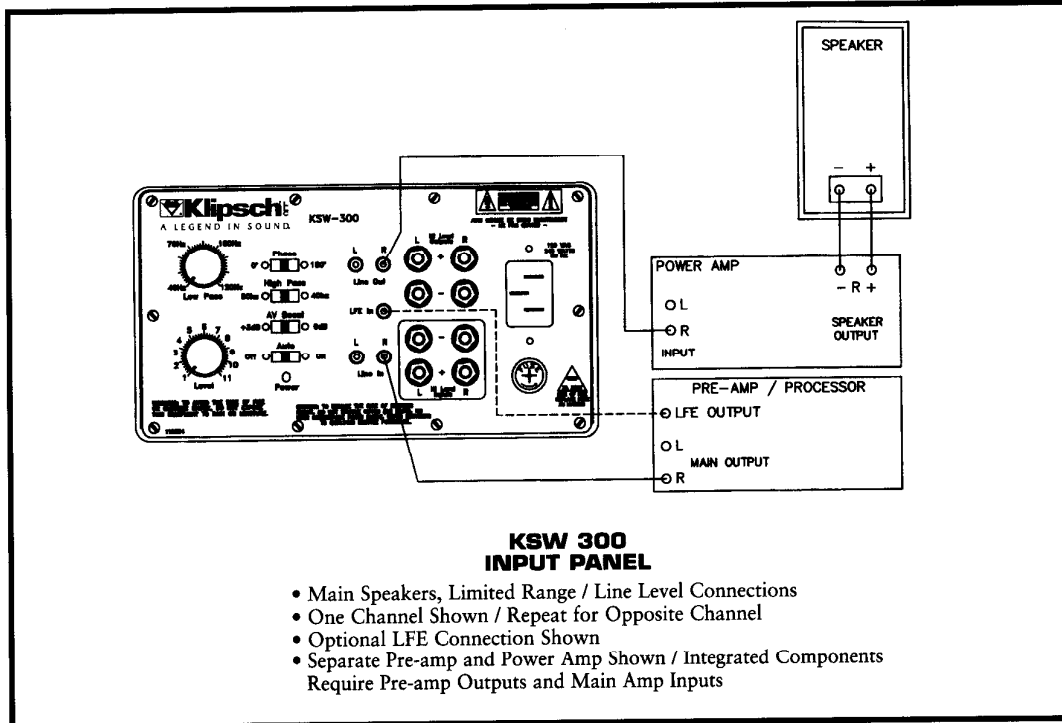
**Figure A**



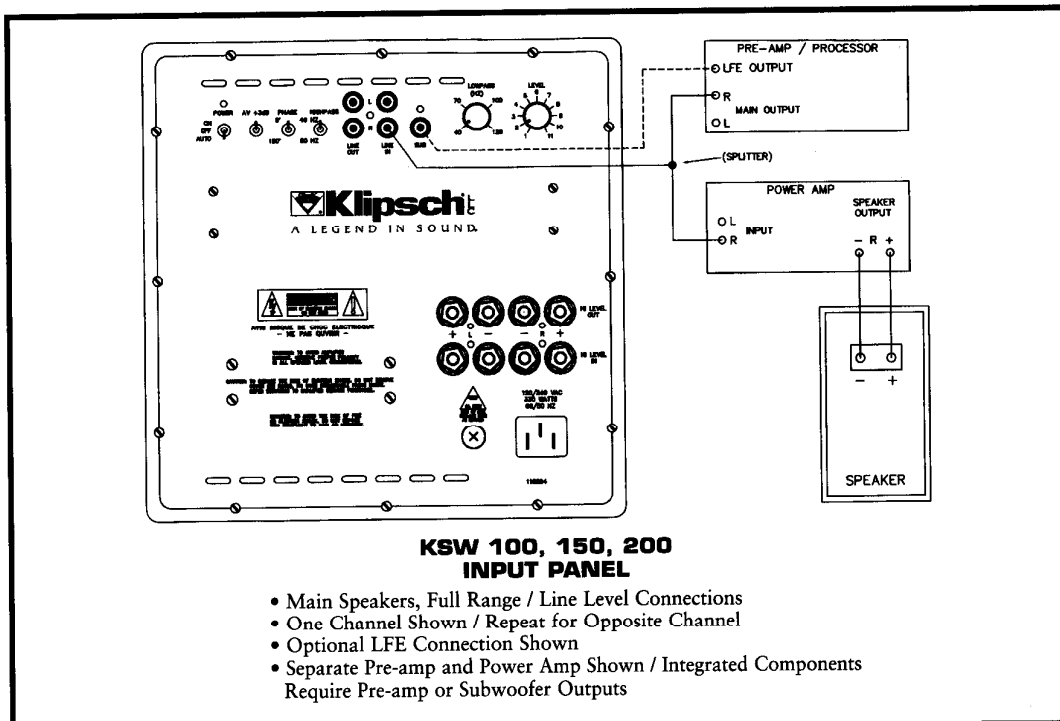
**Figure B**



**Figure C**



**Figure D**



# Component Specifications

## KSW 300

**Type:** 15" bass reflex, tuned port enclosure  
**Amplifier:** 300 watts continuous into 4 ohms  
**Auto Power On:** 2 second ON delay, 15 minute OFF delay  
**Frequency Response:** 25-120 Hz $\pm$ 3 dB  
**Maximum Output:** 112 dB  
**Audio/Video Switch:** +3 dB over entire frequency range  
**Low Pass Crossover:** Continuously variable from 40-120 Hz, 24 dB/octave slope above 120 Hz.  
**High Pass Crossover:** Main speakers: line level outputs with switchable high pass between 40 and 80 Hz, 6 dB/octave slope above 120 Hz. Speaker level outputs with fixed high pass at 100 Hz, 6 dB/octave slope.  
**Phase:** Switchable 0-180 degrees  
**Inputs/Outputs:** Line level RCA phono jacks. Dedicated LFE channel input. High level speaker terminals.  
**Drive Component:** K-1061-K 15" (30.5 cm) driver  
**Weight:** 76 lbs. (34.54 kg)  
**Height:** 19.5" (49.53 cm)  
**Width:** 19" (48.26 cm)  
**Depth:** 19" (48.26 cm)  
**Cabinet:** Medium density fiber board construction (MDF)  
**Finish:** Matte finish black vinyl  
**Voltage:** 110/120 VAC 60 Hz - Export Version 230 VAC 50/60 Hz

## KSW 200

**Type:** 12" bass reflex, tuned port enclosure  
**Amplifier:** 200 watts continuous into 4 ohms  
**Auto Power On:** 2 second ON delay, 15 minute OFF delay  
**Dynamic Headroom:** 1 dB (250 watts into 4 ohms)  
**Frequency Response:** 29-120 Hz $\pm$ 3 dB  
**Maximum Output:** 108 dB  
**Audio/Video Switch:** +3 dB over entire frequency range  
**Low Pass Crossover:** Continuously variable from 40-120 Hz, 24 dB/octave slope above 120 Hz.  
**High Pass Crossover:** Main speakers: line level outputs with switchable high pass between 40 and 80 Hz, 6 dB/octave slope above 120 Hz. Speaker level outputs with fixed high pass at 100 Hz, 6 dB/octave slope.  
**Phase:** Switchable 0-180 degrees  
**Inputs/Outputs:** Line level RCA phono jacks. Dedicated LFE channel input. High level speaker terminals.  
**Drive Component:** K-1050-K 12" (30.5 cm) driver  
**Weight:** 69 lbs. (31.3 kg)  
**Height:** 18.75" (47.63 cm)  
**Width:** 17.5" (44.5 cm)  
**Depth:** 17.5" (44.5 cm)  
**Cabinet:** Medium density fiber board construction (MDF)  
**Finish:** Matte finish black vinyl  
**Voltage:** 110/120 VAC 60 Hz - Dual Voltage Export Version 230/120 VAC 50/60 Hz

## KSW 150

**Type:** 10" bass reflex, tuned port enclosure  
**Amplifier:** 150 watts continuous into 4 ohms  
**Auto Power On:** 2 second ON delay, 15 minute OFF delay  
**Dynamic Headroom:** 1 dB (190 watts into 4 ohms)  
**Frequency Response:** 31-120 Hz $\pm$ 3 dB  
**Maximum Output:** 104 dB  
**Audio/Video Switch:** +3 dB over entire frequency range  
**Low Pass Crossover:** Continuously variable from 40-120 Hz, 24 dB/octave slope above 120 Hz.  
**High Pass Crossover:** Main speakers: line level outputs with switchable high pass between 40 and 80 Hz, 6 dB/octave slope above 120 Hz. Speaker level outputs with fixed high pass at 100 Hz, 6 dB/octave slope.  
**Phase:** Switchable 0-180 degrees  
**Inputs/Outputs:** Line level RCA phono jacks. Dedicated LFE channel input. High level speaker terminals.  
**Drive Component:** K-1049-K 10" (25.4 cm) driver  
**Weight:** 48 lbs. (21.8 kg)  
**Height:** 16.25" (41.28 cm)  
**Width:** 15" (38.1 cm)  
**Depth:** 15" (38.1 cm)  
**Cabinet:** Medium density fiber board construction (MDF)  
**Finish:** Matte finish black vinyl  
**Voltage:** 110/120 VAC 60 Hz - Dual Voltage Export Version 230/120 VAC 50/60 Hz

## KSW 100

**Type:** 8" bass reflex, tuned port enclosure  
**Amplifier:** 100 watts continuous into 4 ohms  
**Auto Power On:** 2 second ON delay, 15 minute OFF delay  
**Dynamic Headroom:** 1 dB (125 watts into 4 ohms)  
**Frequency Response:** 34-120 Hz $\pm$ 3 dB  
**Maximum Output:** 101 dB  
**Audio/Video Switch:** +3 dB over entire frequency range  
**Low Pass Crossover:** Continuously variable from 40-120 Hz, 24 dB/octave slope above 120 Hz.  
**High Pass Crossover:** Main speakers: line level outputs with switchable high pass between 40 and 80 Hz, 6 dB/octave slope above 120 Hz. Speaker level outputs with fixed high pass at 100 Hz, 6 dB/octave slope.  
**Phase:** Switchable 0-180 degrees  
**Inputs/Outputs:** Line level RCA phono jacks. Dedicated LFE channel input. High level speaker terminals.  
**Drive Component:** K-1048-K 8" (20.32 cm) driver  
**Weight:** 39 lbs. (17.7 kg)  
**Height:** 14.75" (37.47 cm)  
**Width:** 13.5" (34.3 cm)  
**Depth:** 13.5" (34.3 cm)  
**Cabinet:** Medium density fiber board construction (MDF)  
**Finish:** Matte finish black vinyl  
**Voltage:** 110/120 VAC 60 Hz - Dual Voltage Export Version 230/120 VAC 50/60 Hz

## KSW 50

**Type:** 8" bass reflex, tuned-port enclosure  
**Amplifier:** 50 watts continuous into 4 ohms  
**Auto Power On:** 2 second ON delay, 5 minute OFF delay  
**Dynamic Headroom:** 2 dB (80 watts into 4 ohms)  
**Frequency Response:** 41-120 Hz $\pm$ 3 dB  
**Maximum Output:** 97 dB  
**Audio/Video Switch:** +3 dB over entire frequency range  
**Low Pass Crossover:** Continuously variable from 40-140 Hz, 24 dB/octave slope above 120 Hz.  
**High Pass Crossover:** Main speakers: line level outputs with fixed high pass filter, 6 dB/octave slope above 120 Hz. Speaker level outputs with fixed high pass at 120 Hz, 6 dB/octave slope.  
**Phase:** Switchable 0-180 degrees  
**Inputs/Outputs:** Line level RCA phono jacks. High level speaker terminals.  
**Drive Component:** K-1051-K 8" (20.3 cm) driver  
**Weight:** 33 lbs. (15 kg)  
**Height:** 13.25" (33.7 cm)  
**Width:** 12" (30.5 cm)  
**Depth:** 12" (30.5 cm)  
**Cabinet:** Medium density fiber board construction (MDF)  
**Finish:** Matte finish black vinyl  
**Voltage:** 110/120 VAC 60 Hz - Dual Voltage Export Version 230/120 VAC 50/60 Hz

## **Klipsch Limited Warranty**

KLIPSCH, L.L.C. ("KLIPSCH") warrants this product to be free from defects in materials and workmanship (subject to the terms set forth below). For a period of five (5) years from the date of purchase, KLIPSCH will repair or replace (at KLIPSCH's option) this product or any defective parts (excluding electronics and amplifiers) in this product. For products that have electronics or amplifiers, the warranty on those parts is for a period of two (2) years from the date of purchase.

To obtain warranty service, please contact the KLIPSCH authorized dealer from which you purchased this product. If your dealer is not equipped to perform the repair of your KLIPSCH product, it can be returned, freight paid, to KLIPSCH for repair. Please call KLIPSCH at 1-800-KLIPSCH for instructions. You will need to ship this product in either its original packaging or packaging affording an equal degree of protection.

Proof of purchase in the form of a bill of sale or receipted invoice, which is evidence that this product is within the warranty period, must be presented to obtain warranty service.

This Warranty is invalid if (a) the factory applied serial number has been altered or removed from this product or (b) this product was not purchased from a KLIPSCH authorized dealer. You may call 1-800-KLIPSCH to confirm that you have an unaltered serial number and/or you purchased from a KLIPSCH authorized dealer.

This Warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of, or to any part of, the product. This Warranty does not cover damage due to improper operation, maintenance or installation, or attempted repair by anyone other than KLIPSCH or a KLIPSCH dealer which is authorized to do KLIPSCH warranty work. Any unauthorized repairs will void this Warranty. This Warranty does not cover products sold AS IS or WITH ALL FAULTS.

REPAIRS OR REPLACEMENTS AS PROVIDED UNDER THIS WARRANTY ARE THE EXCLUSIVE REMEDY OF THE CONSUMER. KLIPSCH SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY LAW, THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PRACTICAL PURPOSE.

Some states do not allow the exclusion or limitation of incidental or consequential damages or implied warranties so the above exclusions may not apply to you. This Warranty gives you specific legal rights, and you may have other rights which vary from state to state.

**Cut along dotted line and mail.**

*For multiple speaker purchases, please fill out only one warranty card.*

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Age \_\_\_\_\_ Marital Status  Single  Married  Divorced

Highest Education Level  High School  College  Graduate School

Did you purchase these speakers for  Music  Home Theater  Both

What kind of music do you like?

Rock  Classical  Jazz  New Age  R&B  Country  Other

Dealer Name \_\_\_\_\_

Dealer Address \_\_\_\_\_

Dealer City/State/Zip \_\_\_\_\_

Date of Purchase \_\_\_\_\_

*Model and serial number must be included to honor your warranty card.*

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Other speakers you own Brand \_\_\_\_\_  Bookshelf  Floorstanding  Custom

Other electronics you own (check as many as apply)

TV (screen size in inches) \_\_\_\_\_  Projection TV (screen size in inches) \_\_\_\_\_  AV amplifier

VCR  Laser disc player  CD player  Cassette player  Turntable  Pre-amp  DVD player

Audio amplifier  Audio receiver  Satellite dish  Cable  DSS (Digital Satellite)

Are you purchasing for  New home  Existing home - How long at existing home? \_\_\_\_\_

How did you hear about Klipsch speakers?

Magazine  Dealer advertising  TV  Friend  Dealer recommendation  Builder



8900 Keystone Crossing, Suite 1220  
Indianapolis, Indiana 46240  
1-800-KLIPSCH • www.klipsch.com

For your records:

Model \_\_\_\_\_

Serial Number \_\_\_\_\_

Date Purchased \_\_\_\_\_

Dealer Name \_\_\_\_\_

Make sure you return your warranty card so that we may keep you up-to-date on new Klipsch products and promotions. As always, if you have any questions, contact your local authorized Klipsch dealer.

**Klipsch, L.L.C.**  
P.O. Box 688  
Hope, AR 71802

Place First  
Class Postage  
Stamp Here