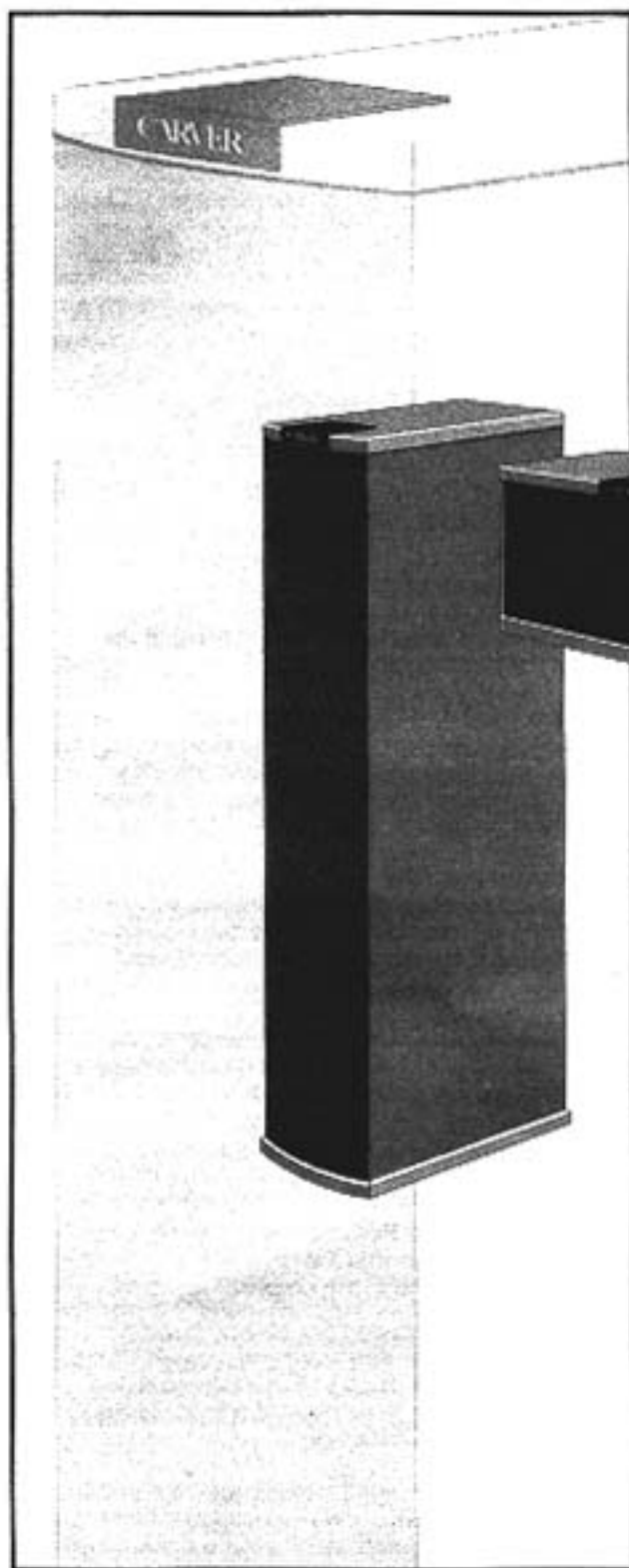


CARVER


Cinema System 5.2

Tower speakers
and
Center speaker



Owner's Manual

Safety

 <div style="background-color: black; color: white; padding: 5px; margin: 5px 0;"> CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN </div> 	<p>The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure, that may be of sufficient magnitude to constitute a risk of electric shock to persons.</p> <p>The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p>
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>	

1. Read Instructions — All the safety and operation instructions should be read before these Carver components are operated.

2. Retain Instructions — The safety and operating instructions should be kept for future reference.

3. Heed Warnings — All warnings on the components and in these operating instructions should be followed.

4. Follow Instructions — All operating and other instructions should be followed.

5. Water and Moisture — These speakers should not be used near water. (bathtub, washbowl, kitchen sink, laundry tub, basement, potted plants, near a swimming pool, etc.)

6. Ventilation — The Center speaker should be situated so that its location or position does not interfere with proper ventilation of the on board amplifier.

7. Heat — These speakers should be situated away from heat sources such as radiators, or other devices which produce heat.

8. Power Sources — The Center speaker should be connected to a power supply only of the type described in these operation instructions or as marked on the Component.

9. Power Cord Protection — Power-supply cords should be routed so that they are not likely to be walked upon or pinched by items placed upon or against them.

10. Cleaning — The speakers should be cleaned only as recommended in this manual.

11. Non-use Periods — The power cord on the Center speaker should be unplugged from the outlet when unused for a long period of time.

12. Damage Requiring Service — These speakers should be serviced only by qualified service personnel when one of the following instances has occurred :

A. The power-supply cord or the plug has been damaged or pinched.

B. The Amplifier panel has been exposed to liquid or long-term moisture.

C. The speakers do not appear to operate normally or exhibit a marked change in performance characteristics.

E. The speaker has been dropped, or its cabinet damaged.

13. Servicing — The user should not attempt to service these devices beyond those means described in this operating manual. All other servicing should be referred to qualified service personnel.

14. To prevent electric shock, do not use this polarized plug with an extension cord, receptacle, or other outlet unless the blades can be fully inserted. This prevents blade exposure and reduces the risk of electric shock.

Pour prévenir les chocs électriques ne pas utiliser cette fiche polarisée avec un prolongateur, un prise de courant ou une autre sortie de courant, sauf si les lames peuvent être insérées à fond sans laisser aucune partie à découvert.

15. Grounding or Polarization — Precautions should be taken so that the grounding or polarization means of the amplifier is not defeated.

16. Internal/External Voltage Selectors — Internal or external line voltage selector switches, if any, should only be reset and reequipped with a proper plug for alternate voltage by a qualified service technician. See an Authorized Carver Dealer for more information.

17. Attachment Plugs for Alternate Line Voltage (Dual voltage models only) — See your Authorized Carver Dealer for information on the attachment

WARNING – TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.
ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRO-DUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

NOTE: 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

ATTENTION: The amplifier with these speakers does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

ATTENTION: Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de class A/de class B (selon le cas) prescrites dans le règlement sur le brouillage

Safety Instructions.	2, 3
Technical.	4, 5
The Tower Speakers.	6
The Center Speaker.	7
Rear Panel.	8, 9
Connections.	10
System Configurations.	11
Line level.	12, 13
Speaker level	14, 15
Bass management	
Preamplifier.	16
Receiver.	17
Positioning.	18
Troubleshooting/Service.	19

Don't forget to check out
the Carver website at
www.carver.com

Technical

Prelude

Thank you for choosing Carver Cinema Loudspeakers and welcome to the exciting world of home theater. As you are about to find out, Carver took a unique approach in the design of these components, creating a line of home theater loudspeakers that combine the accuracy and imaging of high-end audiophile music speakers with the clarity and dynamics associated with the best home theater speakers.

Carver Corporation is able to draw from almost 20 years as an audio innovator in amplifier design to provide the muscle for the two large-displacement, extended excursion 10-inch subwoofers found in this system. Every other system component was evaluated and selected from the realm of audiophile quality speaker components to provide the best in music and home theater reproduction.

With a world-class amplifier, and a list of audiophile-grade components, Carver Cinema Loudspeakers allow you to have it all: superb music reproduction combined with the power and dynamic range demanded by home theater.

The unique configuration of the 5.2 Cinema System was designed with pure integration and ease of installation in mind. Carver engineers wanted to simultaneously increase performance while reducing the need for complex wire runs and numerous cumbersome speaker cabinets. This concept was accomplished by incorporating two very unique design characteristics.

1. Unlike most home theater systems that use a single outboard subwoofer, the Carver Cinema System 5.2 has two high-output 10" subwoofers; one inside each inside speaker tower. This eliminates the need for a separate subwoofer cabinet.

2. The power for these subwoofers is provided by a single amplifier which is located inside the center speaker cabinet. By placing it here, the Carver engineers have eliminated the need for multiple amplifiers and costly power supplies to be placed in each speaker tower. For installation purposes, this design approach means fewer electrical and signal connections and better video shielding.

Unpacking

Carefully unpack your speakers and keep the original carton and packing materials for future moving, shipping, or long-term storage. It is also important to save your sales receipt and keep it in a safe place. Write down the serial numbers in the space provided below.

These speakers should reach you in perfect condition. If you notice any shipping damage, please contact your Carver dealer immediately.

Please take a moment to fill out the enclosed customer response card and return it to Carver. This provides us with important information from our valued customers.

Care

Wipe off the speakers occasionally with a soft, dry cloth. Furniture polishes and waxes are not recommended because they can damage the cloth speaker covering. It is also important not to get any liquids near the amplifier panel as this can cause damage or electrocution.

If the grill cloth gets dusty, use a vacuum cleaner with the dusting attachment to remove dust and build up. Do not use liquids or solvents on the cloth or it may cause discoloration or deterioration of the material.

Cinema System 5.2

The Tower speakers

Features

- Two 10" long throw woofers with a high BL motor structure, rubber surround and a high density cellulose cone, coated with a ceramic-like stiffening compound
- 300 Watt Carver Lightstar mono-block power amplifier with an exclusive BASS TILT control, located inside the Center speaker cabinet
- Video shielded
- High stiffness multi-fiber cabinets for reducing unwanted acoustical vibrations
- The subwoofer amplifier has an internal crossover with line-level inputs and line-level high-pass outputs. It also has speaker-level inputs and speaker-level high-pass outputs
- Crossover slope is 12 dB/Octave @ 100 Hz
- Variable subwoofer level control
- Attractive black cabinet wrapped in durable woven speaker cloth
- One 5.5" high-quality mid range driver and one 1" tweeter per tower
- One rear firing 2.5" driver creates greater realism and a more open spacial presentation. It compliments the direct signal from the front drivers, with a non-directional random-phase signal from the rear.

Specifications

Total Frequency Response:	24Hz-21kHz
Sensitivity:	89 dB
Subwoofer Amplifier Power:	300 Watts
Crossover Low Pass:	100 Hz
Crossover slope:	12 dB/octave @ 100 Hz
Driver Compliment:	
Top section:	one 5.5" mid, one 1" tweeter and one 2.5" rear firing in each tower.
Lower section:	one 10" subwoofer in each tower.
Nominal impedance:	4 ohms for subwoofer 4 ohms for top section
Power range of top section:	It can be used with amplifiers of between 50 and 200 watts
Dimensions WxDxH	8" x 15" x 42"
Weight:	65 lbs

The Center speaker

Features

- Video shielded
- High stiffness multi-fiber cabinet for reducing unwanted acoustical vibrations
- One pair of speaker-level inputs
- Attractive black cabinet wrapped in durable woven speaker cloth.

Specifications

Frequency Response:	80Hz-21kHz
Sensitivity:	91 dB
Nominal impedance:	8 ohms
Power range:	It can be used with amplifiers of between 50 and 200 watts
Driver Compliment:	two 5.5" midrange and one 1" tweeter
Dimensions WxDxH:	20" x 7.75" x 9.25"
Weight	30 lbs.

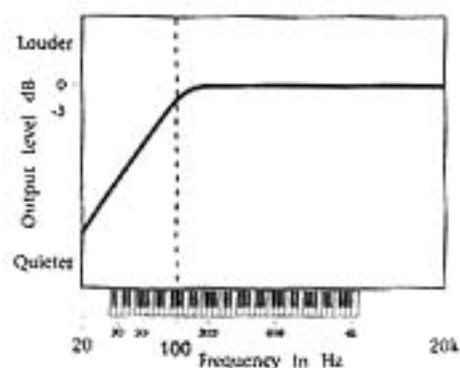
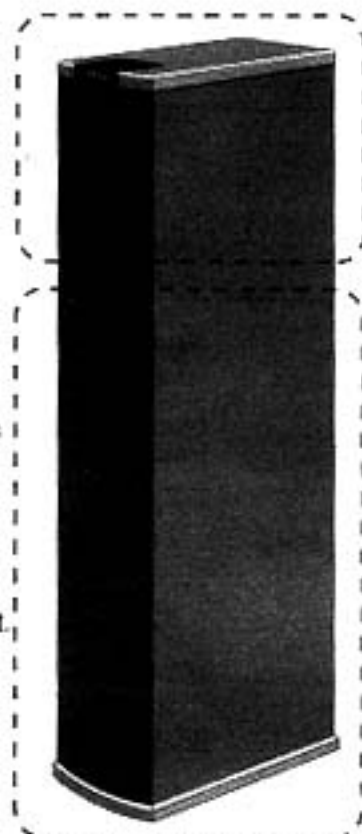
Cinema System 5.2

The Tower speakers

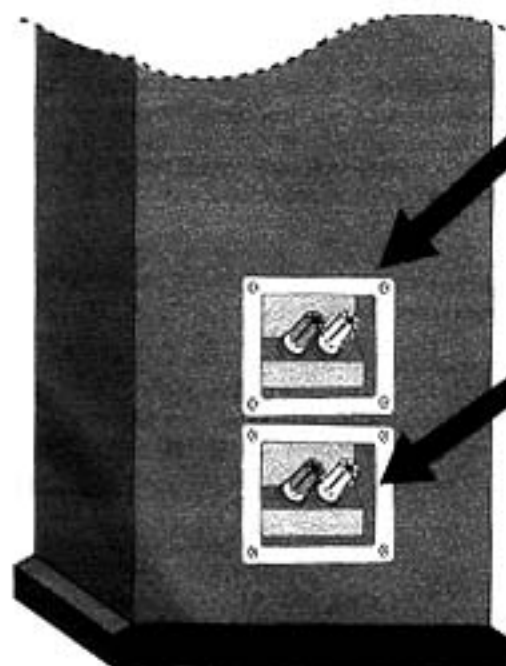
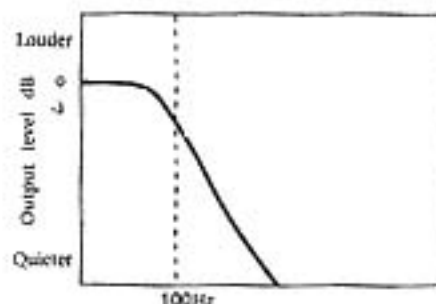
Each tower speaker contains two main sections :

1. The top section contains a speaker system designed to reproduce the frequency range from 100 Hz to 21 kHz. The power is supplied by your own amplifier or receiver.

2. The bottom section contains a subwoofer designed to reproduce those frequencies below 100 Hz. The subwoofer in each tower is powered by an amplifier fitted inside the center speaker cabinet.



These graphs are not exact, but show how the output varies with frequency, and shows the crossover point at 100 Hz.



Rear view of the Tower speakers

These are the binding posts for the top section. The speaker-level signals entering here, must be already crossed-over, with a frequency range of 100 Hz and above. This is achieved using the crossover network inside the center speaker cabinet, see pages 12-15.

If your preamplifier or receiver has its own crossover, see pages 16-17.

These are the binding posts for the subwoofer. They must only connect to the output of the subwoofer amplifier built into the center speaker cabinet. The range of the amplifier is 100 Hz and below.



You must NEVER join the top pair of binding posts to the bottom pair as this will cause serious damage to your amplifiers.

The Center speaker

The center speaker cabinet contains two completely independent sections :

1. The center speaker is capable of reproducing the frequency range from 80 Hz to 21kHz. The power is supplied by the center channel output of your own amplifier or receiver. It receives no power or signal from the internal subwoofer amplifier or crossover.

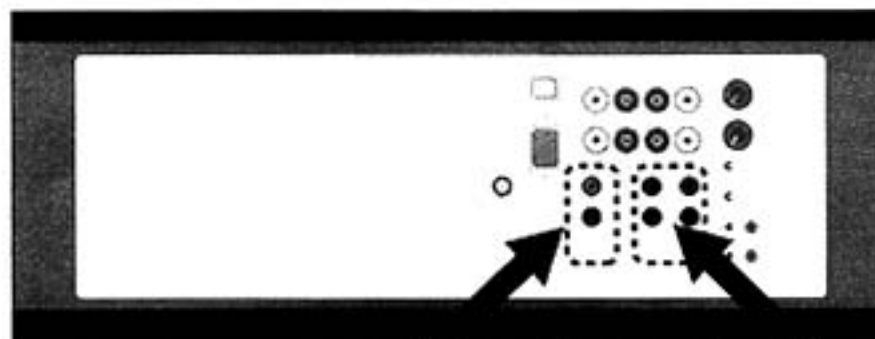
Most Dolby Pro Logic systems allow the center channel bass to be redirected to the front speakers. If your system has this option, we recommend that you select the "Normal" or "Small" mode rather than "Wide" or "Large". In this way, the center speaker does not have to reproduce the lower frequencies, and it can more accurately reproduce the upper frequency range.

The speaker can be placed directly on top of a TV, as it is video shielded. This means that the magnetic fields of the center speaker and the amplifier will not affect the TV picture.



2. The subwoofer amplifier and crossover are mounted on the rear plate of the center cabinet. Apart from its location, it has nothing to do with the center channel speaker, it is all part of the front channel system.

- The subwoofer amplifier provides speaker level power to the subwoofer in each of the towers.
- The crossover has options for speaker level or line level connections which split the front output of your receiver or preamplifier into two parts, one high-pass and one low pass.



Rear Panel

See the following pages for more details.

1

Center speaker inputs.

Note: These inputs must only connect to the speaker level output of your center channel amplifier or receiver.



2

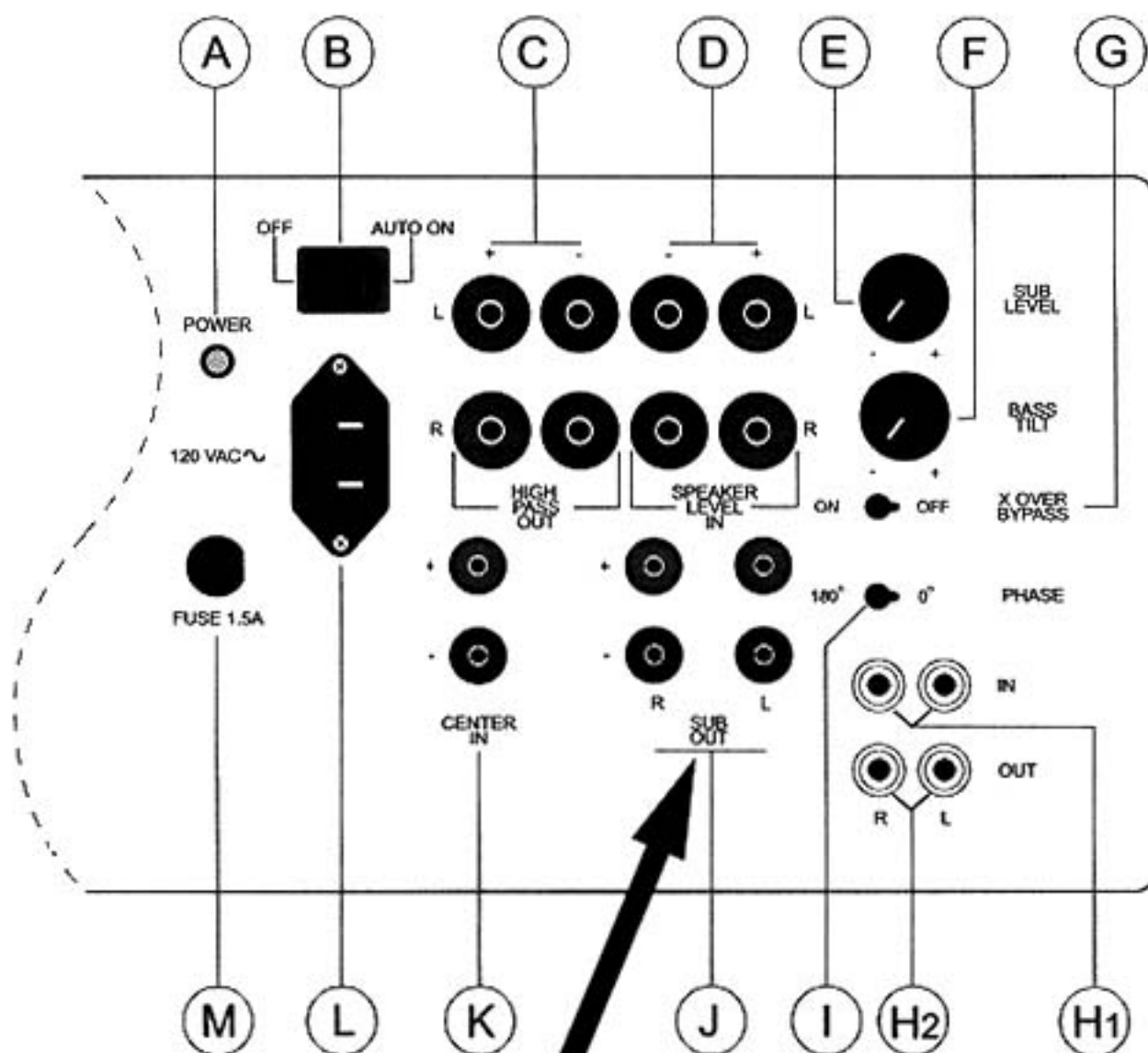
Subwoofer amplifier outputs.

Note: These outputs must only connect to the lower set of binding posts of each tower speaker.



Cinema System 5.2

The subwoofer amplifier rear panel



WARNING



The subwoofer amplifier outputs must **ONLY** be connected to the Lower set of binding posts on the rear of the tower speakers. They must **NEVER** be connected to the outputs of an amplifier or receiver, or serious damage will result. See Pages 12 for a diagram of the connections.



ALL EQUIPMENT MUST BE TURNED OFF BEFORE MAKING ANY CONNECTIONS. MAKE SURE THAT YOU HAVE GOOD ACCESS TO THE REAR PANELS SO THAT ALL CONNECTIONS CAN BE MADE CORRECTLY.

Cinema System 5.2

A. POWER LIGHT

The power light will turn on when the power switch is turned on.

B. POWER SWITCH

When this switch is turned on, the subwoofer amplifier will become active, but only when it is also receiving an audio signal into (D) or (H1).

C. HIGH PASS OUT

If you are using a receiver connected to the speaker level inputs (D), connect these outputs with speaker wire directly to the upper set of binding posts on the back of the tower speakers. These speaker-level outputs are crossed over and provide no bass below 100 Hz.

D. SPEAKER LEVEL IN

If you are using a receiver which has no line level outputs, you can connect its front speaker-level outputs to these inputs. The incoming signals are split so that all of the frequencies below 100 Hz are sent to the subwoofer amplifier and all of the frequencies above 100 Hz are sent to the high pass outputs (C). See page 14 for more details.

E. SUB LEVEL

This is essentially a volume control for the subwoofer amplifier. Use it to blend the subwoofer output with the speakers in the rest of the system.

F. BASS TILT

When this is in the fully counter clockwise position, the subwoofer output is fairly flat across the bass range. For example the power output at 40 Hz is similar to the output at 60 Hz. As you rotate the control clockwise (+), the output at 40 Hz becomes greater than at 60 Hz.

BASS TILT allows you to adjust the ultra-low frequencies and tailor your system appropriately. It helps to correctly blend the subwoofer output with your other speakers.

G. X OVER BYPASS.

If your preamplifier or receiver has its own crossover, use this switch to bypass the crossover inside the subwoofer amplifier. This will avoid crossing over twice. See Page 16 for some examples of the use of this switch.

H1. LINE IN

The line level inputs connect to the output from a preamplifier or the line-level "pre-outs" from a receiver. The incoming signals are split so that all of the frequencies below 100 Hz are sent to the subwoofer and all of the frequencies above 100 Hz are sent to the Line outputs (H2). See page 12.

H2. LINE OUT

The line-level outputs provide a high-pass output that can be fed back into your amplifier or receiver which drives the tower speakers. This is a copy of the signals going into the Line inputs (H1), except that the range below 100 Hz has been attenuated.

I. PHASE

This alters the phase of the subwoofers with respect to the other speakers in your system. Once your system is set up, try this in both positions until your home theater is producing the most dynamic and full bass.

J. SUB OUT

These are speaker-level outputs from the internal subwoofer amplifier. The left pair of positive and negative posts connect to the bottom pair of posts on the left tower speaker. The right pair connects in a similar way, to the right speaker.

WARNING! These amplified outputs *only* connect to the subwoofer in each tower. They must not be connected to an external amplifier as this would damage the internal circuitry of both and void the factory warranty.

K. CENTER INPUT

Connect this input with speaker wire to the speaker-level output of your center channel power amplifier or receiver.

NOTE: These are input-only binding posts, the binding posts that are labeled "SUB OUT" are output-only binding posts.

L. Power Cord

Connect to a properly configured outlet providing the correct line voltage specified for your model.

M. FUSE

This should only be replaced with a fuse of the same value shown on the rear panel of your subwoofer. *Always* unplug the power cord first.

Connections

Binding Posts

The binding posts that are located on the back of the speakers and on the subwoofer amplifier panel are designed to accept bare speaker wires or standard banana plugs.

ALL EQUIPMENT MUST BE TURNED OFF BEFORE MAKING ANY CONNECTIONS.

Bare wire connections :

- 1) Strip 1/2" of insulation off each wire and make sure to carefully twist all the fine strands together. If even one strand is loose and touches the opposite terminal, a short circuit will result.
- 2) Unscrew the terminals and insert the wire. Tighten the connection down onto the wire (finger tight only, DO NOT use a wrench).



Figure 3

Banana plug connections:

The binding posts will also accept banana plugs for ease of connecting and disconnecting.

Make sure that the outer terminal is completely screwed down before plugging in the banana plugs, this ensures good electrical contact.



Figure 4

Speaker Wires

Use high quality wire for speaker connections. For longer runs, use heavier gauge wire. The following chart will be helpful in determining which gauge wire should be selected.

Wire Length	Wire Gauge
Up to 25 ft	16 gauge
25 to 40 ft.	14 gauge
40 to 60 ft.	12 gauge
60 to 100 ft	10 gauge

To prevent any electrical interference, try not to run speaker wires close to AC lines or sockets.

Connection Cords

Regarding the line-level connections, please consider the following points :

- Take care to choose reliable hookup cables (also known as patch cords or RCA cables). There are many different grades and brands available so it is recommended that you consult your Carver dealer for advice.
- These cables should be fully shielded and as short as possible for the job.
- Most cables have a preferred method for removal and installation, some have to be removed with a twisting action. Take care when installing or removing tight cables, or they can cause damage to the subwoofer amplifier panel or your other components.
- Typically, the right patch cord plugs are red and the left plugs are white, grey or black.

Speaker Phasing

When connecting any speaker to an amplifier with speaker wire, it is important to match the red (+) terminals of one component to the red terminals of the other. Similarly, the black (-) terminals of one, connect to the black terminals of the other.

When connecting components with patch cords, the line-level outputs labelled "left" should only connect to "left" inputs on the other component, similarly, "right" connects to "right".

These precautions will keep your system "in phase". For example, if you have one loud drum beat, all speaker cones will be moving outwards at the same time. If one speaker is "out of phase" then its speaker cone is moving in at this time. This will cause a cancellation and result in a bass reduction.

Glossary

The following terms are used throughout this manual :

Line-Level

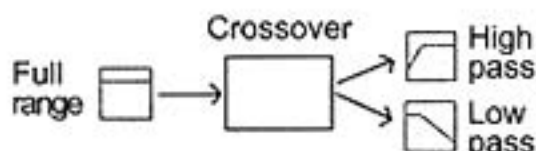
This is the signal level that comes out of almost all audio components, such as CD players, tape decks and preamplifiers. It ranges from several hundred millivolts up to a few volts. Line-level signals are used not to drive speakers, but to transfer signals between components.

Speaker-Level

The line level signals entering an amplifier are amplified into stronger level signals, capable of driving speakers. The output can range from a low level up to 100 volts or more for powerful amplifiers.

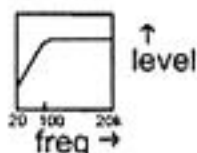
Crossover

This is a device which will split an incoming signal into two or more frequency bands, above or below a crossover point. In this system, the crossover point is 100 Hz.



High pass

This is the output from a crossover which contains the information above the crossover point. The high frequencies are passed, and the lows are attenuated. A graph of frequency vs output level looks like this :



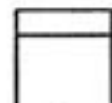
Low pass

This refers to the crossover output below the crossover point. The lows are passed and the highs are attenuated.



Full frequency range

Refers to the full audio range, from 20 Hz to 20 kHz.



Configurations

The crossover has been designed to be as versatile as possible, allowing the speakers to be used with all home theaters systems.

The following illustrations show how the Tower speakers can be connected to different systems.

Note: for all of the examples, there are a few main points:

1. The lower binding posts of each Tower speaker are connected to the subwoofer amplifier output posts.
2. The center speaker input binding posts are connected directly to the center channel of your amplifier or receiver.
3. The upper binding posts of each Tower speaker receive a high-pass speaker-level signal from your amplifier or receiver.

Line-level connections.....12,13

These are the connections if you are using a preamplifier/amplifier system, or a receiver, which has line-level, full-frequency, left and right outputs.

Speaker-level connections.....14,15

These are the connections if you have a receiver which only has speaker-level outputs.

Bass Management

Preamplifier.....16

Receiver.....17

These are the connections for preamplifiers or receivers which can redirect the bass from the front outputs. In these two cases, the front output is already crossed over and so there is no need to use the speaker crossover network.

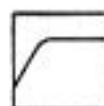
Line-level connections

These inputs and outputs are used if you have a preamplifier/amplifier system, or a receiver with line level outputs, as shown on page 13.

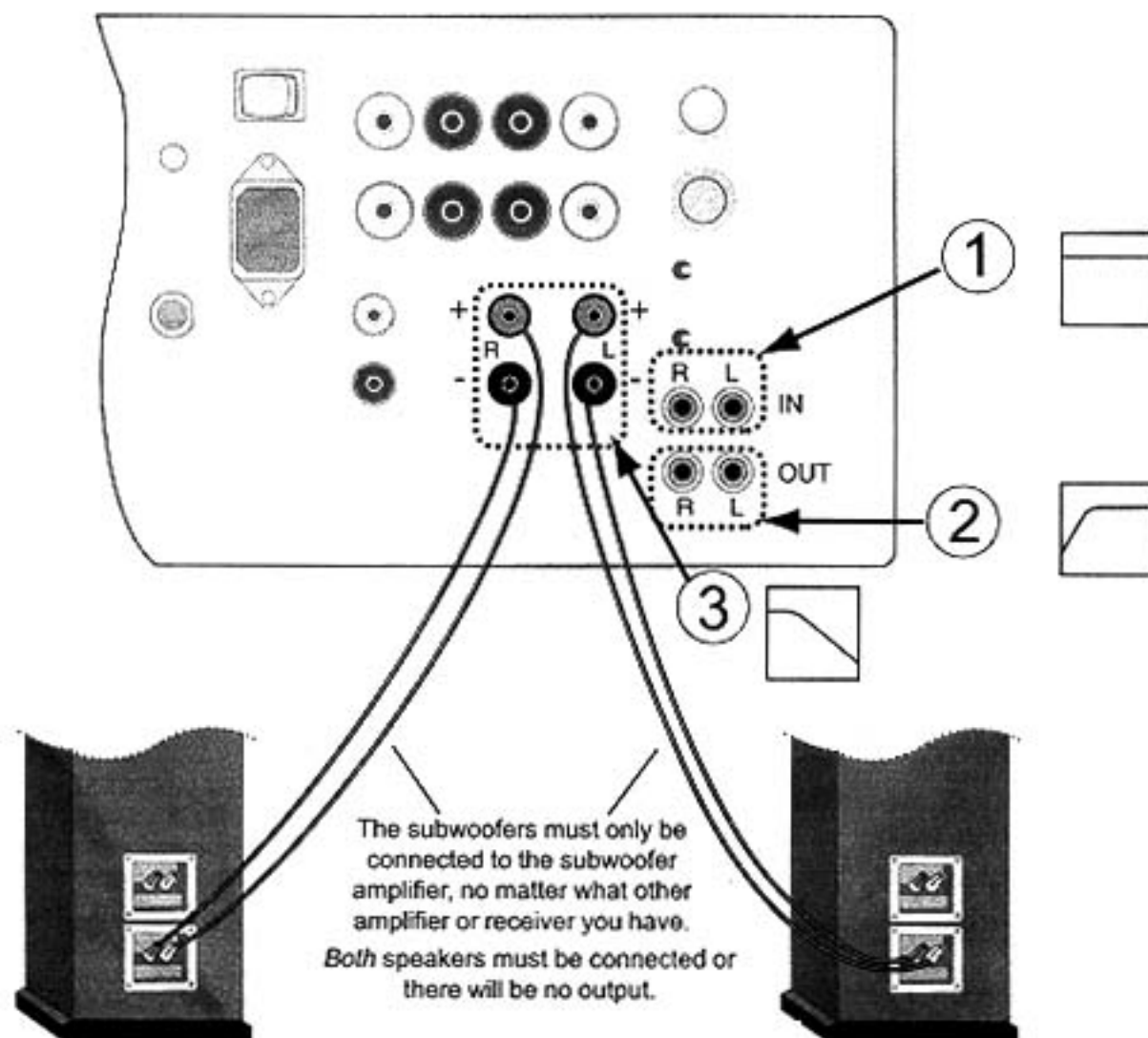
1. These inputs are where you connect the line level, full frequency signals from the preamplifier, or a receiver with line level outputs (often labelled "pre-outs"). The input signals are split into two parts by an active crossover network :



2. The line level outputs are high pass, 100 Hz and above. They connect to the inputs of the amplifier or receiver which will drive the top section of the tower speakers. They come out of the active crossover still in stereo, only the subwoofers are in mono.



3. The subwoofer output is at speaker-level and the frequency range is 100 Hz and below. The power is supplied by the internal amplifier and not by your amplifier or receiver. Each subwoofer receives the same mono signal, which is a combination of the original left and right bass information.



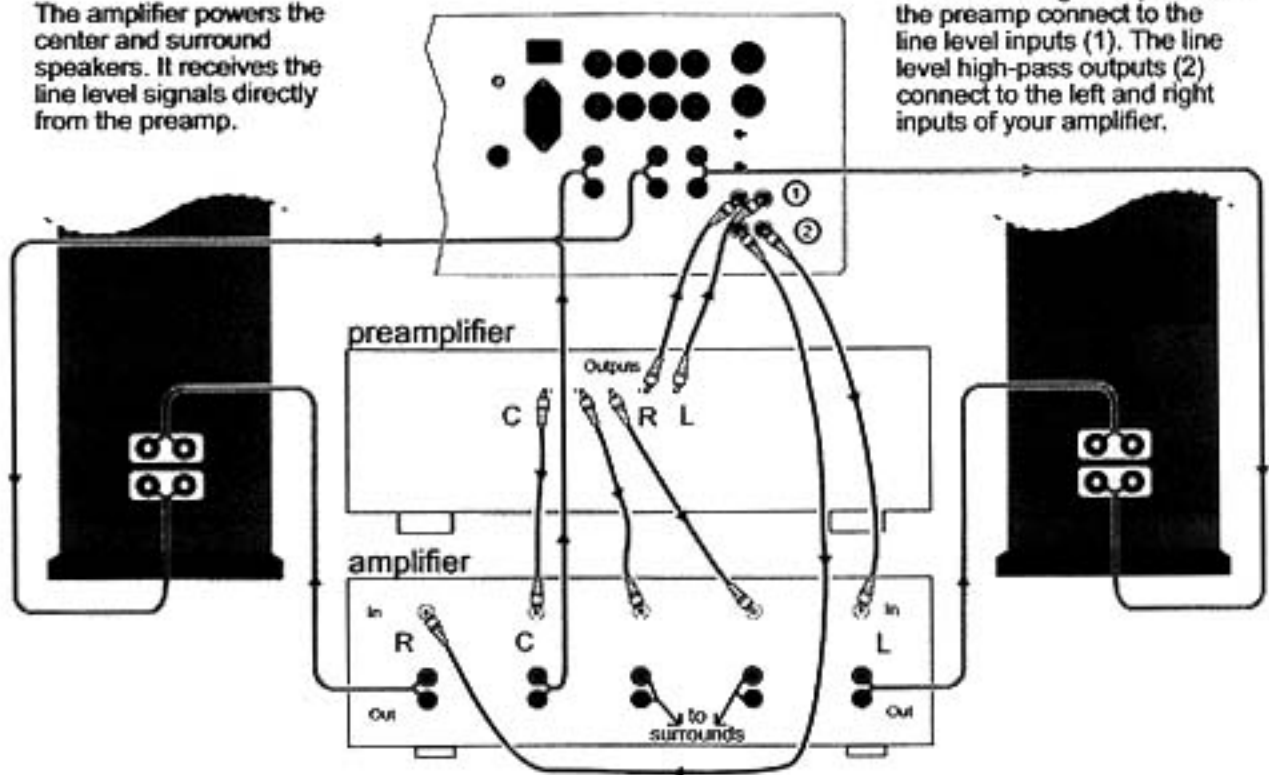
Cinema System 5.2

Examples

A. Connections to a preamplifier/amplifier component system

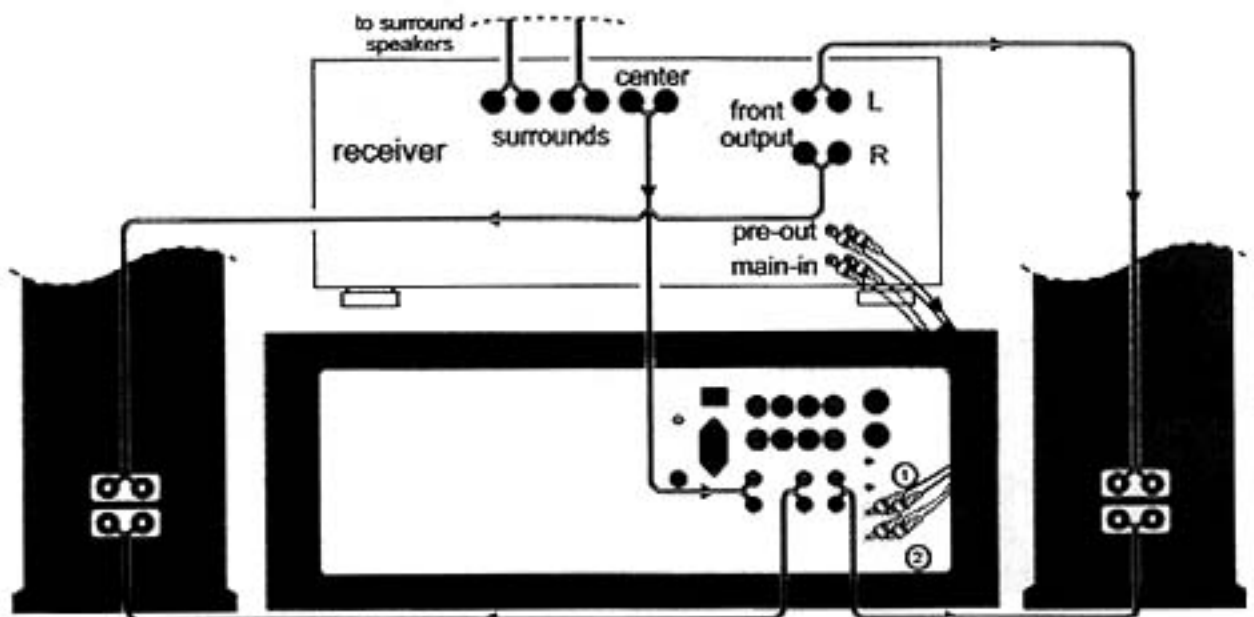
The amplifier powers the center and surround speakers. It receives the line level signals directly from the preamp.

The left and right outputs from the preamp connect to the line level inputs (1). The line level high-pass outputs (2) connect to the left and right inputs of your amplifier.



B. Connections to a receiver which has line level "pre-outs".

The surround and center speakers are powered by the receiver. The receiver line-level pre outs for the left and right channels are connected to the line level inputs (1), and the receiver left and right "main inputs" connect to the line-level high pass outputs (2). In this way, the receiver speaker-level outputs will be correctly crossed over and can be connected to the upper binding posts of the Tower speakers.



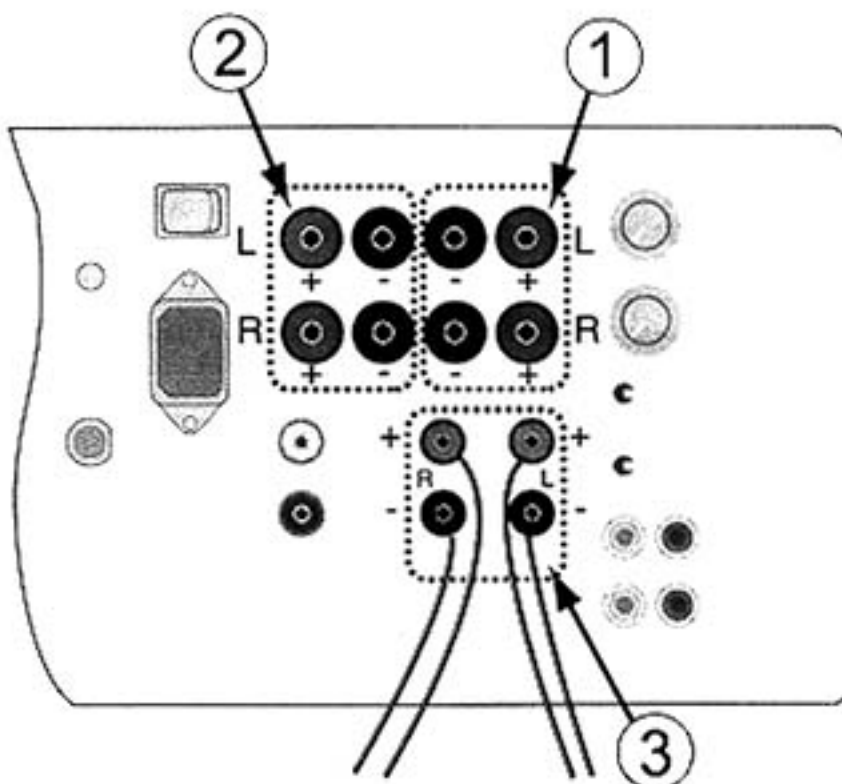
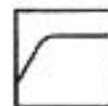
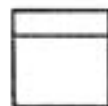
Speaker-level connections

These are used if you have a receiver with speaker level outputs but no line level outputs. If you are using a preamplifier/amplifier system, or a receiver with line level outputs, it is best to use the line level inputs.

1. These posts connect with speaker wire to the left and right amplified outputs of your receiver. The incoming full frequency range speaker level signals from your receiver are split into two parts by the crossover :

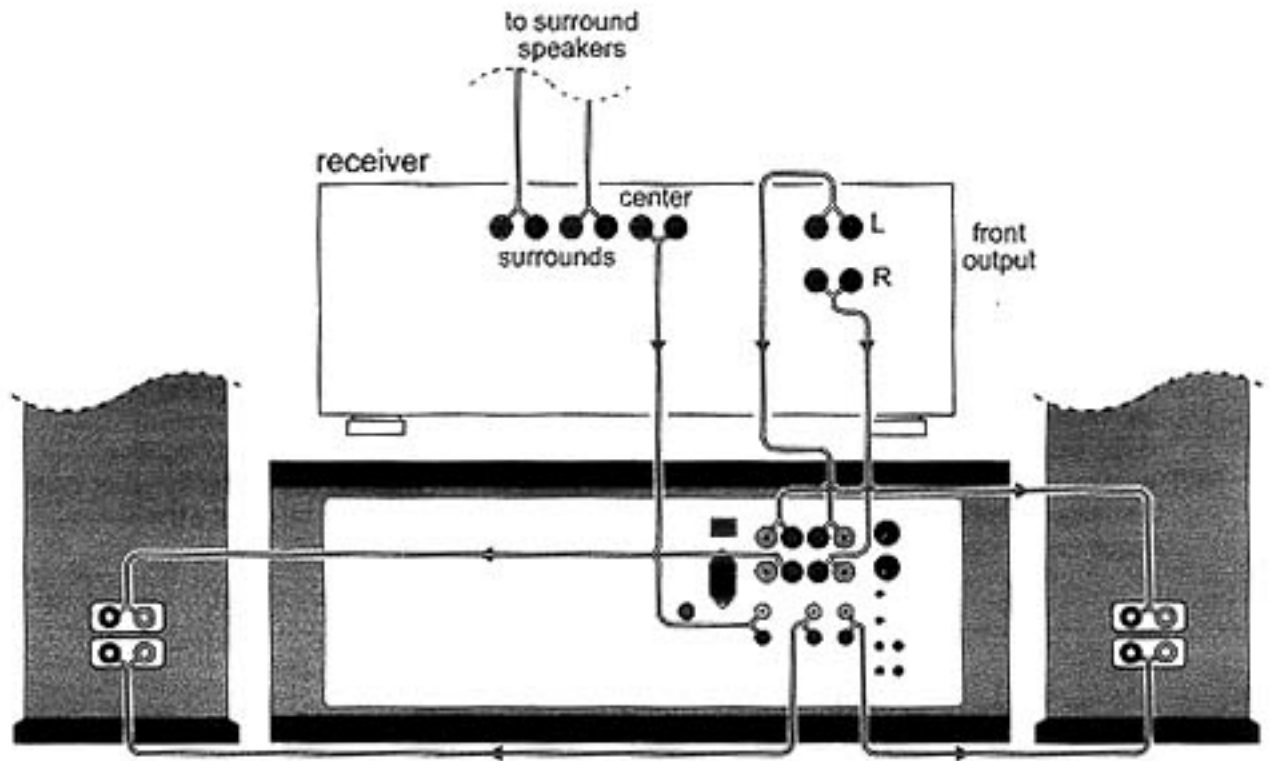
2. The "High Pass" outputs are the speaker level information, 100 Hz and above. These connect to the top section of each of the towers. There is no amplification of the signal, the power is supplied by your receiver. For example, if your receiver has an output of 100 watts, then so do these high pass outputs. The only change is that the lower frequencies are attenuated in level using a passive crossover network.

3. The subwoofer output is exactly the same as described on the previous pages.



The subwoofers are connected in exactly the same way as shown on the previous page

Example



The receiver powers the surround speakers and the center speaker.

The top section of the Tower speakers play the upper frequency range, powered by the front output of your receiver (once the signals have passed through the speaker-level crossover).

The subwoofer in each Tower plays the lower frequency range, powered by the subwoofer amplifier.

Note: if your receiver has a line level subwoofer output, you should find out if the frequency range of the front output is affected. For example, if the front outputs are still at the full frequency range, then you must connect the receiver as shown. If the front outputs play just the upper frequency range, then you should connect your receiver as shown on Page 17.

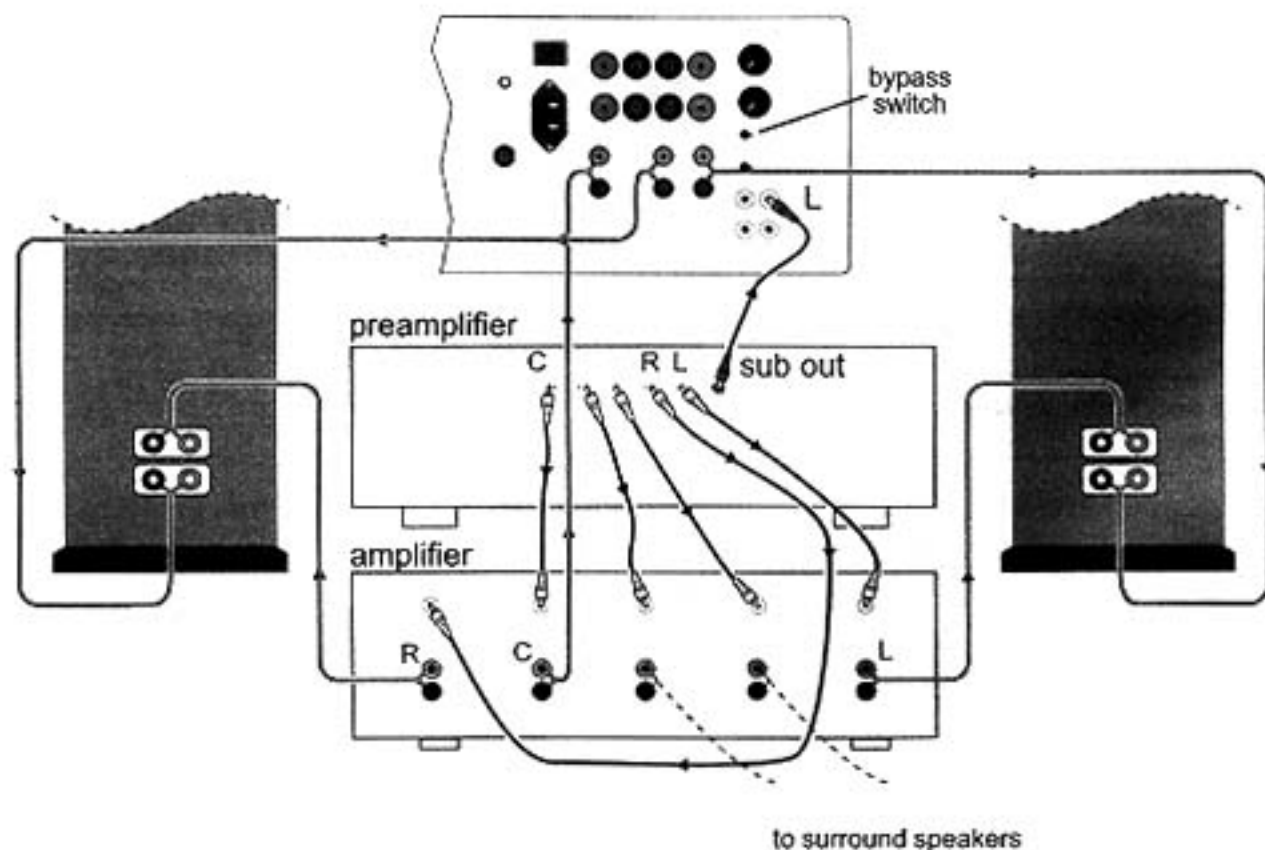
Bass management- preamplifier

If you have a preamplifier which has a Bass management system, the front outputs can be crossed over and the bass redirected out of a separate subwoofer output. In this case, there is no need to use the internal crossover in the center channel cabinet.

Make sure that your preamplifier has been correctly configured so that the bass is removed from its front and center outputs and redirected to its subwoofer output.

The connections are as follows:

1. The left and right, high-pass, line-level outputs of the preamplifier connect **directly** to the inputs of the front amplifier.
2. The speaker level outputs of the front amplifier connect directly to the top section of the Tower speakers.
3. The line-level, low-pass, subwoofer output of the preamplifier connects to the LEFT line level input of the subwoofer amplifier rear panel. There is no need to connect anything to the right input.
4. As the preamplifier has its own crossover, you must bypass the internal crossover using the bypass switch on the subwoofer amplifier rear panel.
5. The top section of the towers will play the crossed over signal powered by the front amplifier.
6. The lower section will be playing the front channels bass, powered by the subwoofer amplifier inside the center channel cabinet. If you have a Dolby Digital preamplifier, it will be playing the low frequency effects (LFE) channel in addition to the front and center bass.



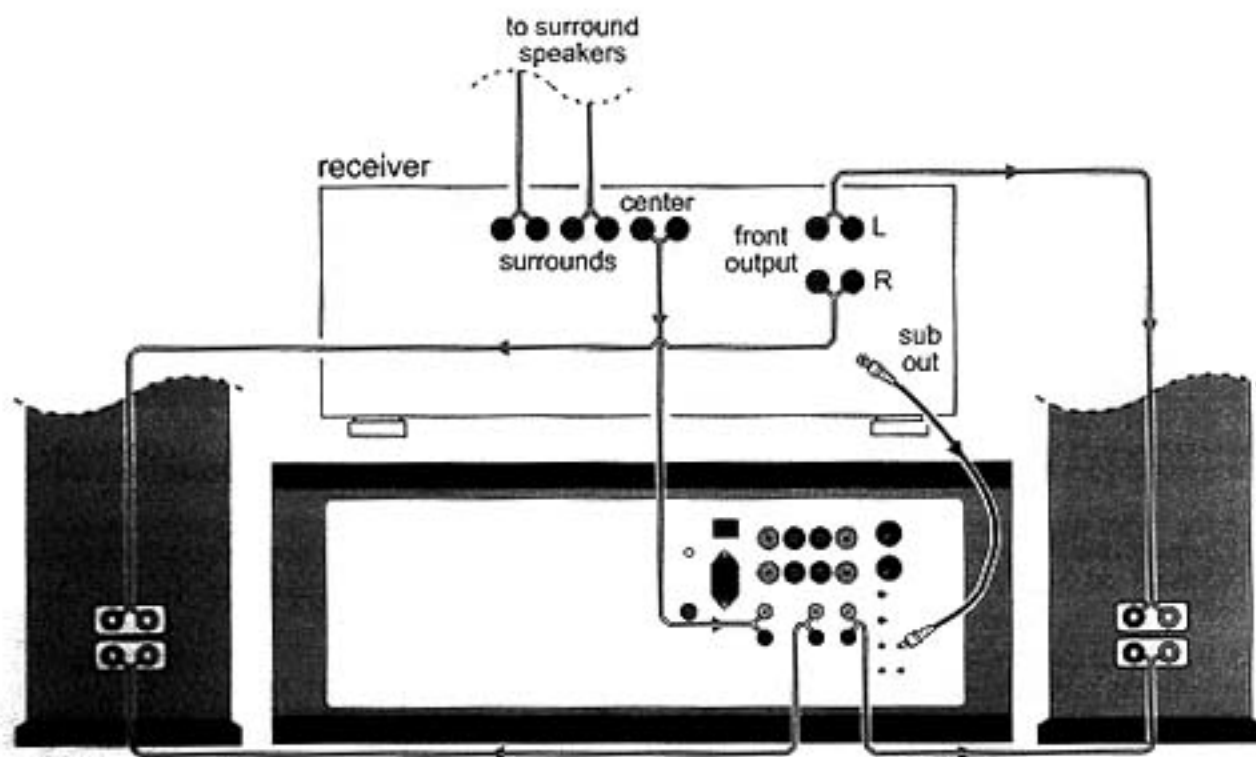
Bass management- receiver

If you have a receiver which has a Bass management system, its front speaker-level outputs can be crossed over and the bass redirected to a separate line-level subwoofer output.

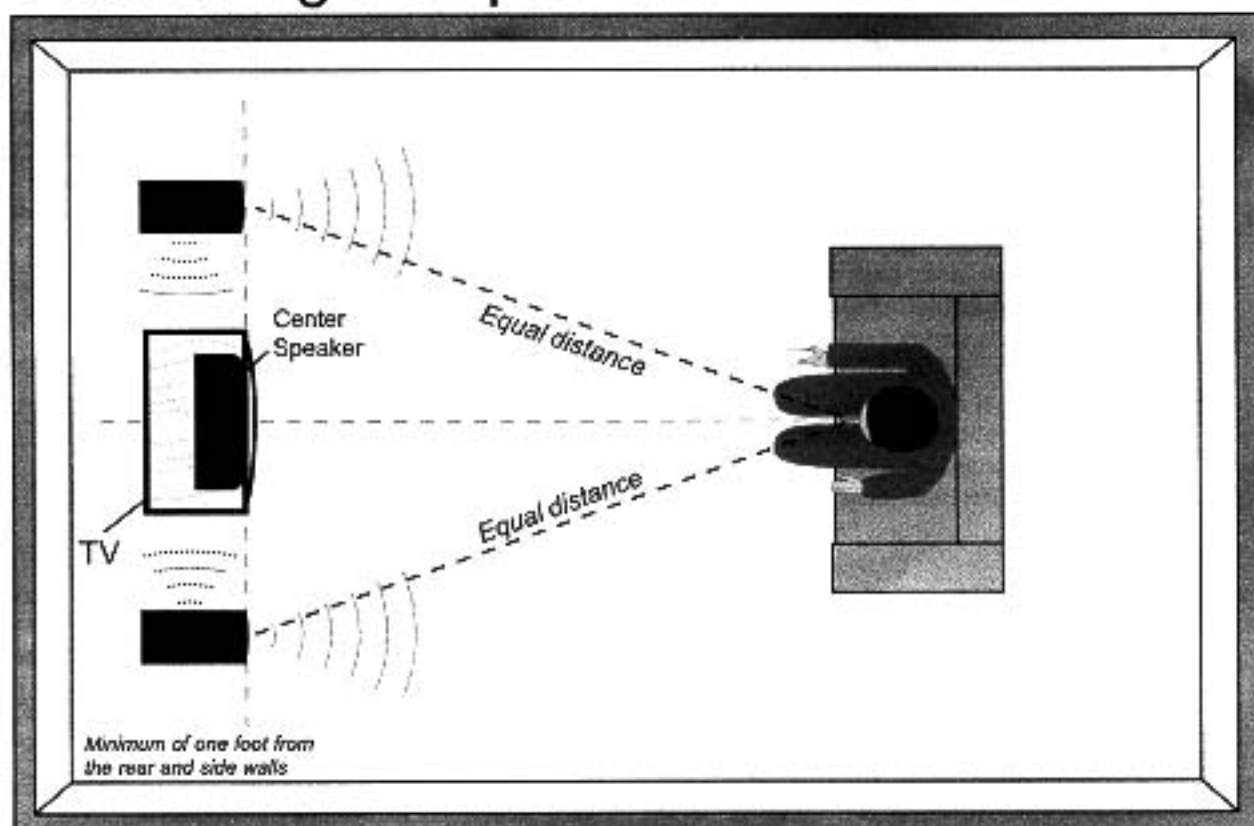
Make sure that your receiver has been correctly configured so that the bass has been removed from its front and center channels and redirected to its subwoofer line-level output.

The connections are as follows :

1. The front speaker-level, high-pass outputs of the receiver connect directly to the speaker binding posts of the top section of the Tower speakers.
2. The subwoofer line-level, low-pass, output of the receiver connects directly to the left line-level input on the rear panel.
3. Set the rear panel switch to bypass the internal crossover.
4. The top section of the towers will then play the front high-pass signals, powered by the receiver front outputs.
5. The lower section of the towers will play the bass from the front channels, powered by the subwoofer amplifier. If you have a Dolby Digital receiver, they will play the LFE channel, in addition to the front and center channel bass.



Positioning the speakers



Center speaker placement

The center speaker produces most movie dialogue and focuses listener attention towards the center of the picture screen. For this reason, careful and accurate positioning of the center speaker is very important. Please follow the recommendations listed below.

1. Position the front face of the speaker so it is close to the front edge of the TV cabinet. This prevents sound waves from reflecting off of the TV cabinet and causing distortion.
2. The center speaker can sit on top, or directly underneath the TV as long as it is located on the centerline and not off to one side of the screen or room.
3. If possible, keep the center speaker height close to that of the top of the tower speakers, within two feet.
4. Make sure that the center speaker is positioned so that the amplifier panel can be easily accessed for connection to the subwoofers.

Tower speaker placement

The tower speakers are marked left and right. The left speaker has a woofer which points to the right, the right tower has a woofer which points to the left. For example, if the left tower is placed to the left of your TV, then the woofer points at the TV. This unique arrangement makes it very important to consider the following recommendations when setting up the towers.

1. Position the towers so that the TV screen is directly between them. Make sure that they are no closer than one foot away from the sides of the TV cabinet. This will help reduce any reflections from upsetting the woofer performance.
2. If you want the towers to be closer to the TV, then place the left speaker on the right and the right speaker on the left. This will make the woofers face away from the TV.
3. If you plan on positioning the towers close to the side walls, make sure that they are no closer than one foot away from the side walls.
4. Place both towers exactly the same distance away from your listening position. (See illustration above.)
5. The towers should be no closer than one foot away from the rear wall.

Troubleshooting

If you are having trouble with your speaker system, try some of the following troubleshooting tips before contacting your dealer or Carver technical support.

No sound, No power, No lights.

Check to see that the subwoofer amplifier is turned on.

Check that the AC cord is properly plugged in

Make sure that the wall socket is active. If it is connected to a switch, make sure the switch is turned on.

Carefully unplug the power cord and check that the subwoofer fuse is still good.

Subwoofer sounds quiet.

Make sure that the subwoofer level control has not been turned down and that the subwoofer is receiving a signal.

Try changing the PHASE switch to the opposite position.

Make sure that the speakers have been wired correctly in-phase.

Subwoofer sounds "boomy".

Adjust the subwoofer level control

Adjust the Bass Tilt control.

Swap the position of the towers so that the subwoofers are firing away from the TV.

Playback is mixed with hum.

Check all patch cords to make sure none are defective or loose.

Make sure that the signal cables have not been routed close to any AC lines, power transformers, dimmer switches or Halogen lamps

If you have cable TV or draw your FM signal from cable, disconnect the RF cable from your system. If the hum goes away, you may have a "ground loop" in your system. Contact your dealer or Carver technical support

Service

We suggest that you read the LIMITED WARRANTY completely to fully understand your warranty/service coverage. Also be sure to save the sales receipt in a safe place. It will be necessary for warranty service.

If your speakers should require service, we suggest you contact the dealer from whom you purchased your unit, or contact us at the factory.

Have the model number and serial number ready and we will then give you detailed instructions on how to obtain prompt repair service.

Factory Address
Carver Corporation
P.O. Box 137
Woodinville, WA
98072-0137

425-335-1975
Main Telephone (425) 482 3400
425-329-3404
Technical support 1 800 521 4333

(toll-free number if you are calling from within the USA or Canada)

Main Fax (425) 482 3401

Service fax (425) 482 3442

E-mail Custservice@carver.com

Carver Corporation reserves the right to improve its products at any time. Therefore, specifications are subject to change without notice.

© 1997 Carver Corporation.
Cinema System 5.2 Owner's manual
Part #990-10200-00 Rev. A

"Dolby", "Pro Logic" and "Dolby Digital" are trademarks of Dolby Laboratories.

If you have access to the Internet, you can check out the full line of Carver products and company announcements on our World Wide Web page (<http://www.carver.com>).