



JBL[®] STUDIO 5 SERIES

loudspeakers



**AVAILABLE AT
DIGITAL CINEMA**



OWNER'S MANUAL

THANK YOU FOR CHOOSING THIS JBL® PRODUCT

For more than 60 years, JBL® engineers have been involved in every aspect of music and film recording and reproduction, from live performances to the recordings you play on the go and in your home, car or office.

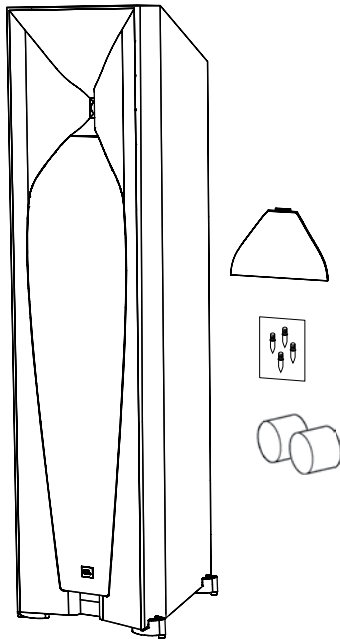
We're confident that the JBL system you have chosen will provide every note of enjoyment you expect – and that when you think about purchasing additional audio equipment for your home, car or office, you will once again choose JBL products.

Please take a moment to register your new product on our Web site, www.jbl.com. Registering enables us to keep you posted on our latest advancements and helps us to understand our customers and build products that meet their needs.

INCLUDED ITEMS

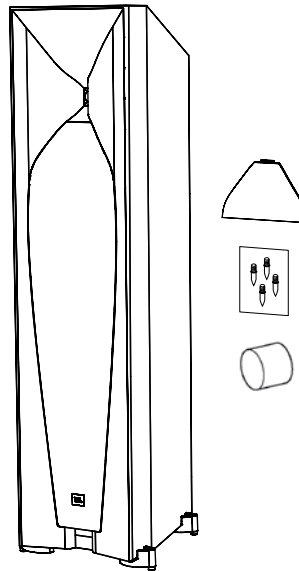
Studio 590

One Studio 590 speaker; one horn cover; two port tube inserts; four metal spikes



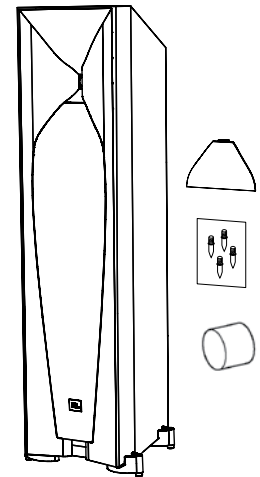
Studio 580

One Studio 580 speaker; one horn cover; one port tube insert; four metal spikes



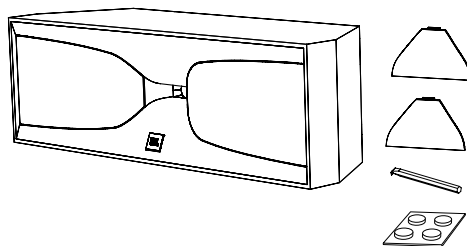
Studio 570

One Studio 570 speaker; one horn cover; one port tube insert; four metal spikes



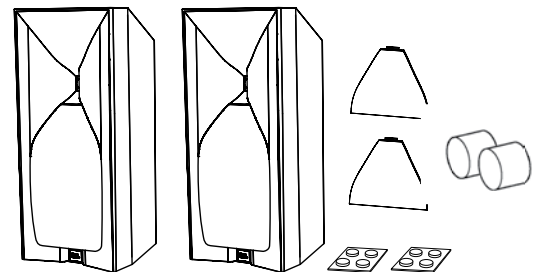
Studio 520C

One Studio 520C speaker; two horn covers; one grille removal tool; one card with adhesive rubber feet



Studio 530

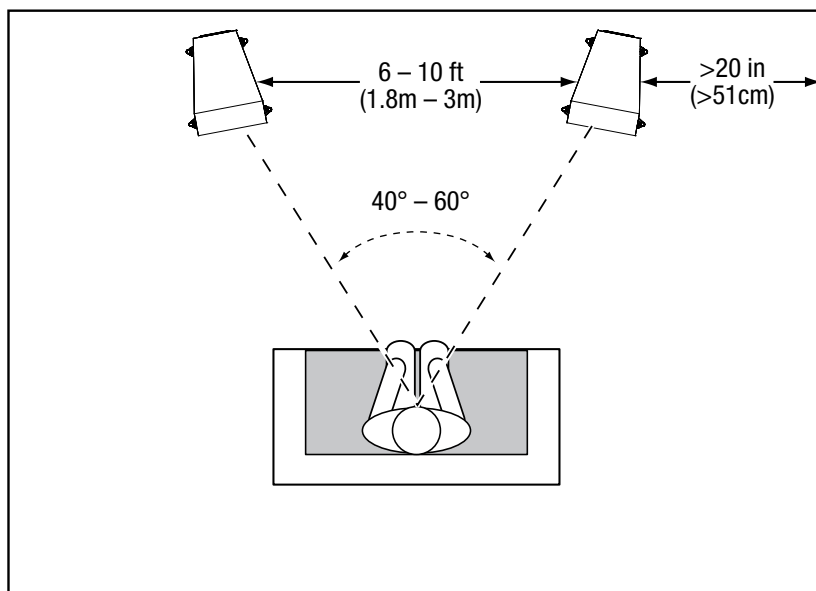
Two Studio 530 speakers; two horn covers; two port tube inserts; two cards with adhesive rubber feet



PLACEMENT

STUDIO 590/STUDIO 580/STUDIO 570/STUDIO 530 – LEFT AND RIGHT CHANNELS

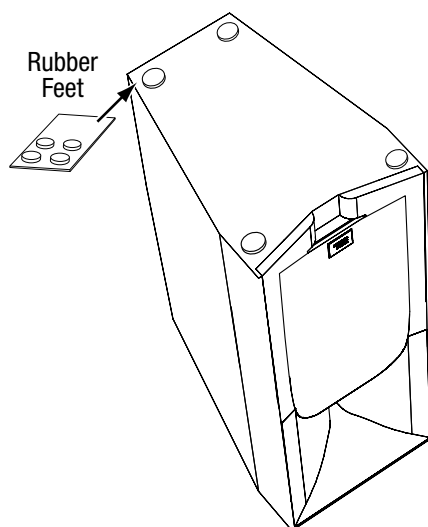
For the best results, place the speakers 6 – 10 feet (1.8m – 3m) apart. Angling the speakers toward the listening position can improve the stereo imaging. The speakers will produce the most accurate stereo soundstage when the angle between the listener and the speakers is between 40 and 60 degrees.



Generally, bass output will increase as the speaker is moved closer to a wall or corner.

For the best performance, we recommend that you place the speakers at least 20 inches (51cm) away from the side walls.

- Position Studio 530 bookshelf speakers so that the centers of their horns are approximately at ear level. Peel the adhesive rubber feet from the card and apply them to the bottoms of the speakers.

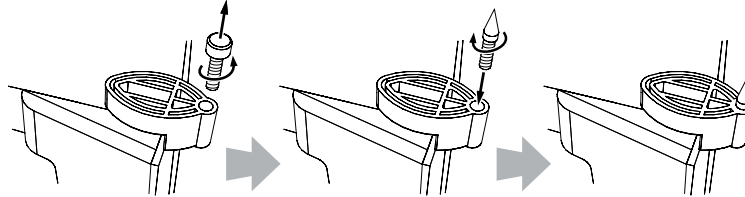


USING THE SUPPLIED SPIKES (STUDIO 590/STUDIO 580/STUDIO 570)

Four metal spikes are supplied for use when you place the speaker on a carpeted surface. Using the spikes decouples the speaker from the floor and prevents unwanted acoustic damping.

To insert the spikes:

1. Gently lay the speaker on its side (not its front or back) on a soft, nonabrasive surface.
2. Unscrew and remove the rubber bumpers from the speaker's feet.

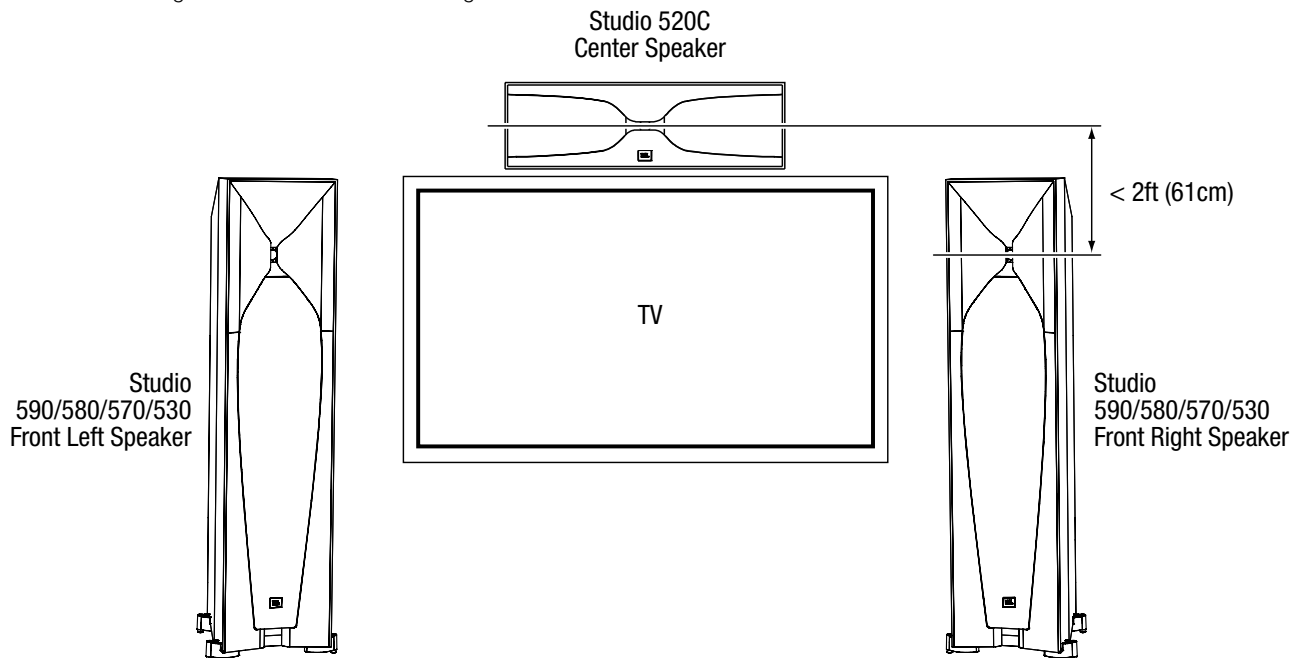


3. Screw each spike into the threaded insert in each foot. Make sure all four spikes are screwed in completely for stability.

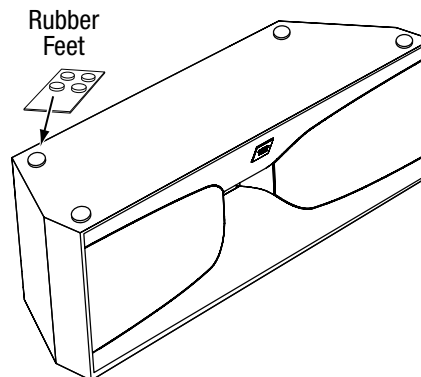
Note: NEVER drag the speaker to move it, as this will damage the spikes, the feet and/or the speaker cabinet itself. Always lift the speaker and carry it to its new location.

STUDIO 520C

You should place the 520C center speaker directly above or below the center of your TV screen. The center of the speaker's horn should be no more than 2 feet (61cm) above or below the centers of the front left and front right speakers' horns. If your TV set is deep enough, you can set the center speaker on top of the TV, with the speaker's front edge even with the TV's front edge.

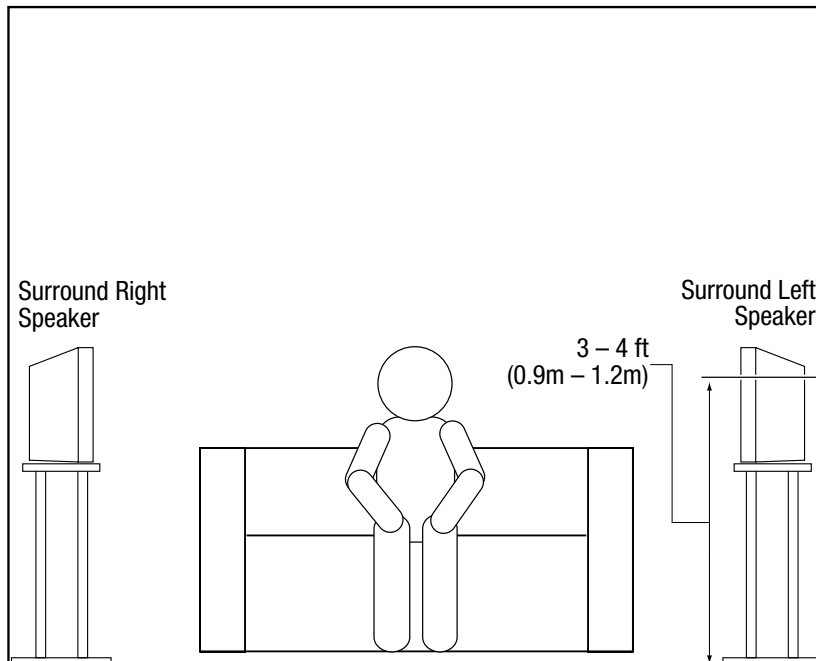
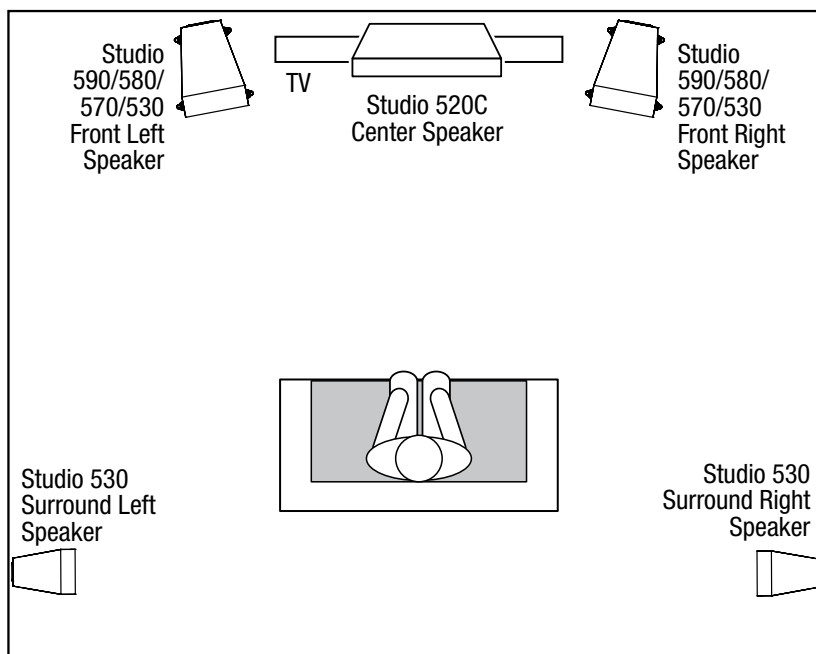


- Peel the adhesive rubber feet from the card and apply them to the bottom of the speaker.



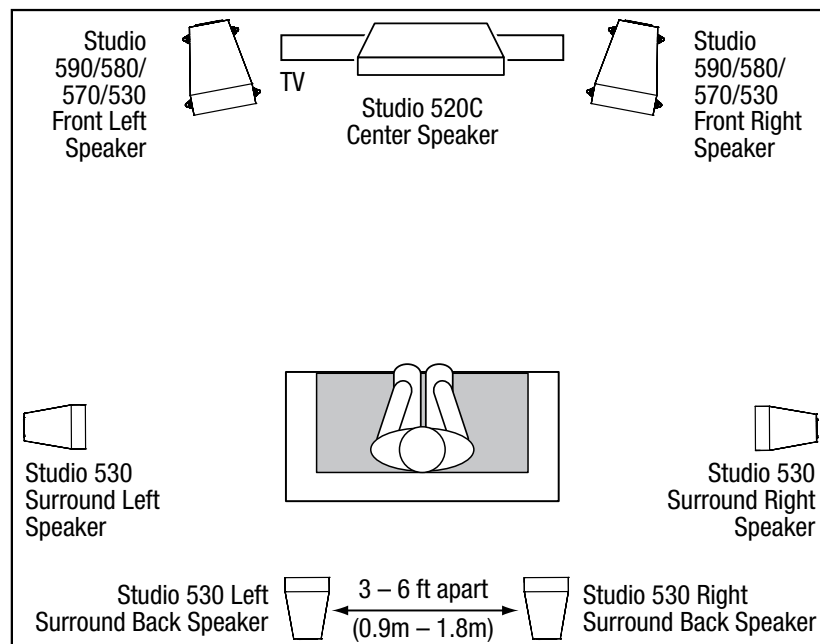
STUDIO 530 – SURROUND CHANNELS (5.1-CHANNEL SYSTEM)

When you use Studio 530 speakers as surround-channel speakers in a 5.1-channel system, place them slightly behind the listening position, facing each other. Ideally, they should be 3 – 4 feet (0.9m – 1.2m) above the floor. An alternate location would be on a wall behind the listening position, facing forward. The surround speakers should not call attention to themselves while they're playing. Experiment with their placement until you hear a diffuse, ambient sound accompanying the sounds that you hear from the front left, front right and center speakers.



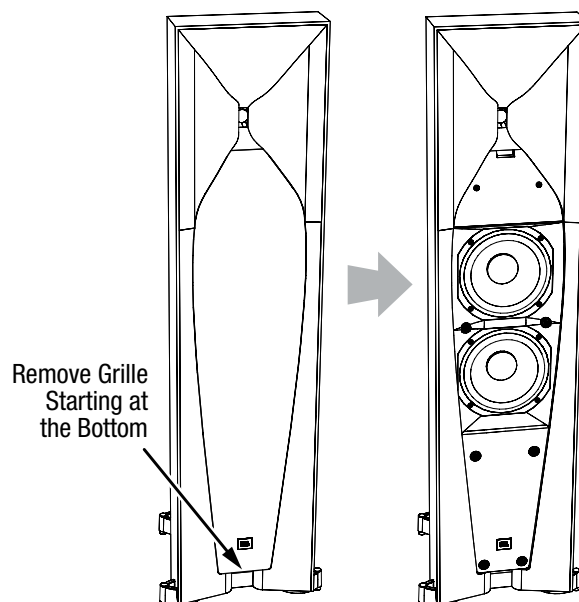
STUDIO 530 – SURROUND CHANNELS (7.1-CHANNEL SYSTEM)

When you use Studio 530 speakers as surround-channel speakers in a 7.1-channel system, place the surround side speakers directly to the sides of the listening position, at least 3 – 4 feet (0.9m – 1.2m) above the floor. Place the surround back speakers on the wall behind the listening position, also at least 3 – 4 feet (0.9m – 1.2m) above the floor and 3 – 6 feet (0.9m – 1.8m) apart.



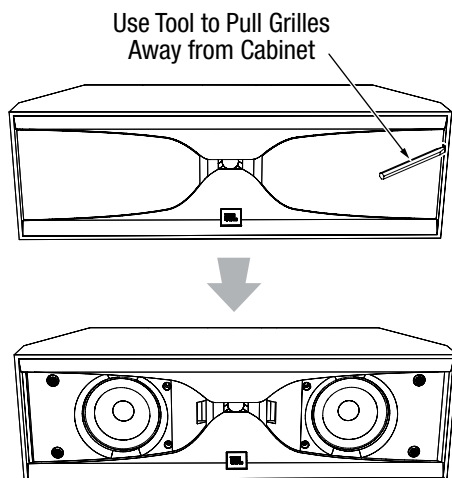
REMOVING THE GRILLES

You can remove the Studio 5 speaker grilles by pulling them away from the enclosure, starting at the bottom.



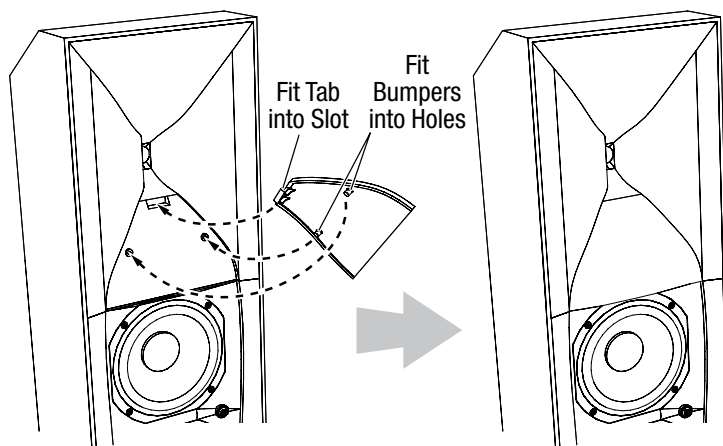
REMOVING STUDIO 520C GRILLES

To remove the Studio 520C grilles, use the provided grille removal tool to pull the grilles away from the enclosure as shown, then remove them the rest of the way by hand.



ATTACHING THE HORN COVERS

If you remove the speakers' grilles, attach the provided horn covers as shown. Make sure that both rubber bumpers on the horn cover fit into the holes in the speaker.



CONNECTIONS

CAUTION: Make sure that all of the system's electrical components are turned OFF (and preferably unplugged from their AC outlets) before making any connections.

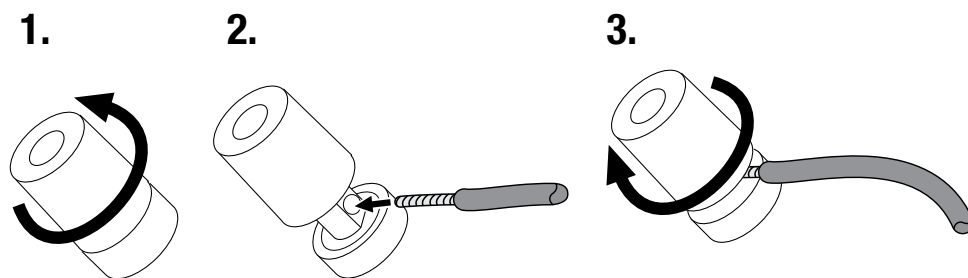
Speakers and amplifiers have corresponding positive and negative ("+" and "-") connectors. All Studio 5 series speakers have connectors that are marked "+" and "-" on the terminal-cup assembly. Additionally, the "+" connectors have red markings, while the "-" connectors have black markings.

To ensure proper polarity, connect each "+" connector on the back of the amplifier or receiver to the respective "+" (red) connector on each speaker. Connect the "-" connectors in a similar way. Do not reverse polarities (i.e., "+" to "-" or "-" to "+") when making connections. Doing so will cause poor stereo imaging and diminished bass performance.

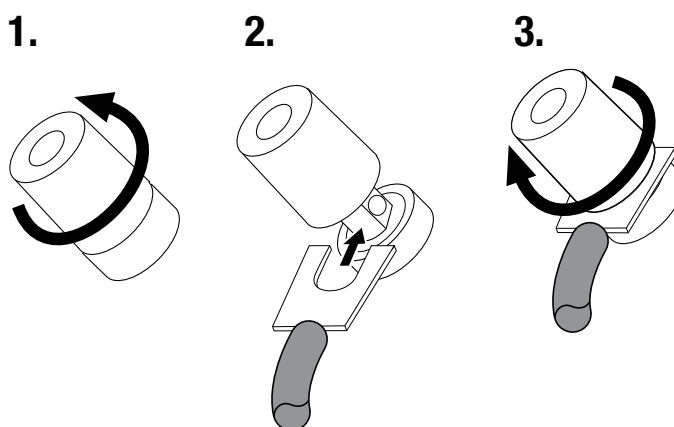
IMPORTANT: Make sure the "+" and "-" wires or connectors do not touch each other or the other terminal. Touching wires can cause a short circuit that can damage your receiver or amplifier.

The Studio 5 series speakers' gold-plated speaker connectors can accept a variety of wire connector types: bare wire, pin connectors, spade connectors and banana connectors.

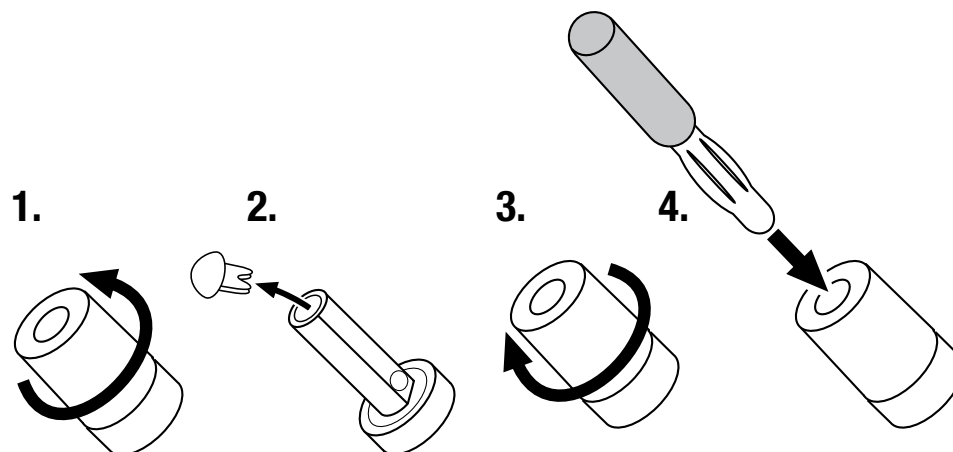
USING BARE WIRE OR PIN CONNECTORS:



USING SPADE CONNECTORS:



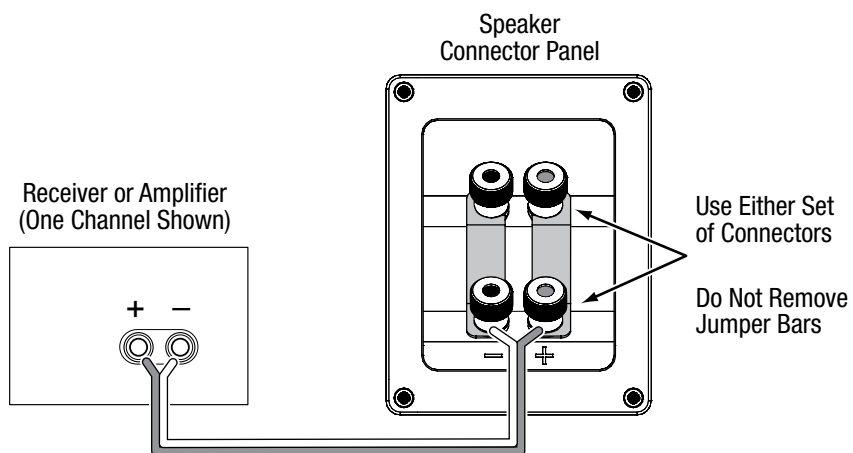
USING BANANA CONNECTORS:



BASIC SINGLE-WIRE CONNECTION

To connect the speakers using a single wire, connect the amplifier to each speaker as shown in the illustration below. You can use either set of connectors on the connector panel.

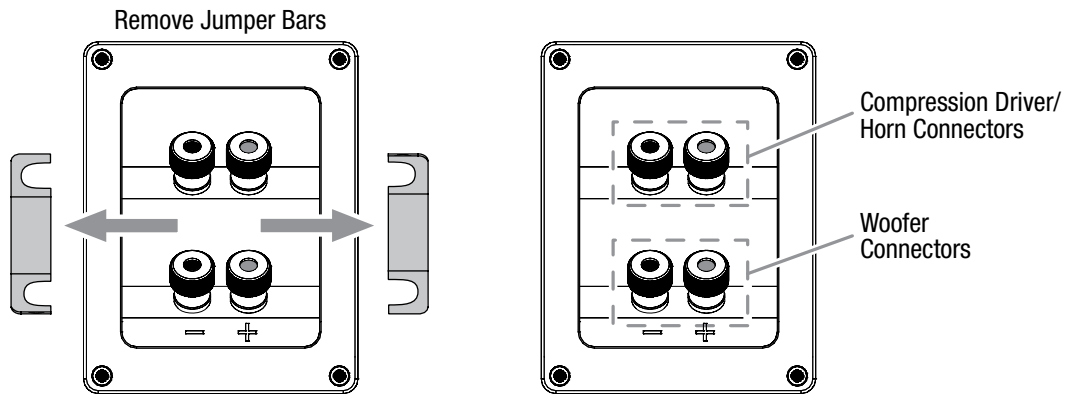
IMPORTANT: Do not remove the metal jumper bars from between the two sets of connectors when connecting the speaker wires.



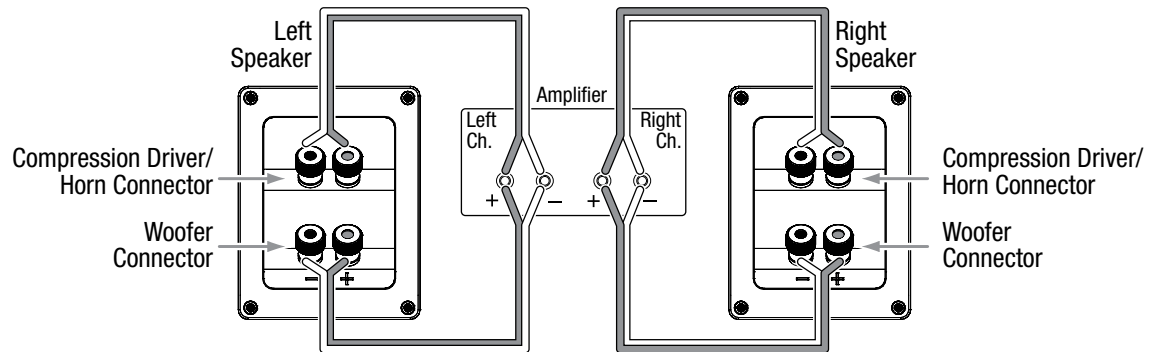
BI-WIRE CONNECTION

All Studio 5 series speaker connector panels have two sets of input connectors that are joined by metal jumper bars. The upper set of connectors is for the compression-driver/horn assembly, and the lower set of connectors is for the woofer(s). This arrangement allows you to bi-wire the speakers using a single stereo amplifier or using two stereo amplifiers. Bi-wiring can offer performance advantages and more flexibility in power-amplifier selection over a conventional single-wire connection.

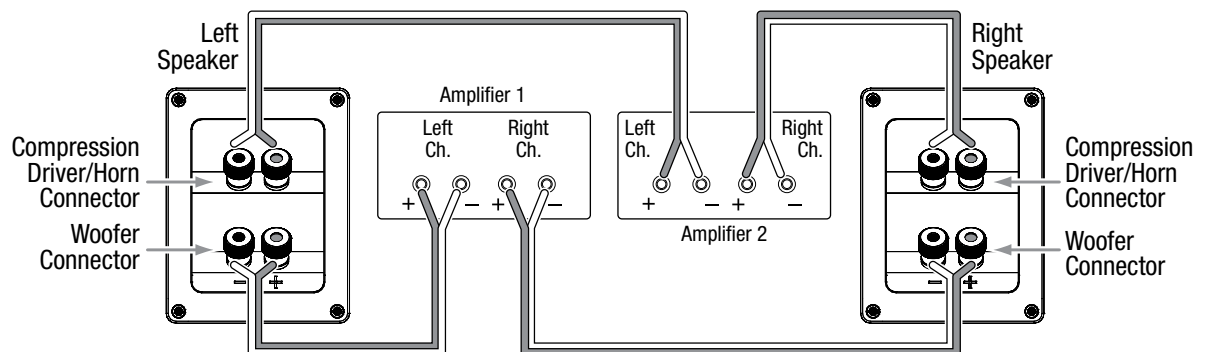
Before bi-wiring the speakers, remove the jumper bars.



SINGLE-AMPLIFIER BI-WIRING



DUAL-AMPLIFIER BI-WIRING

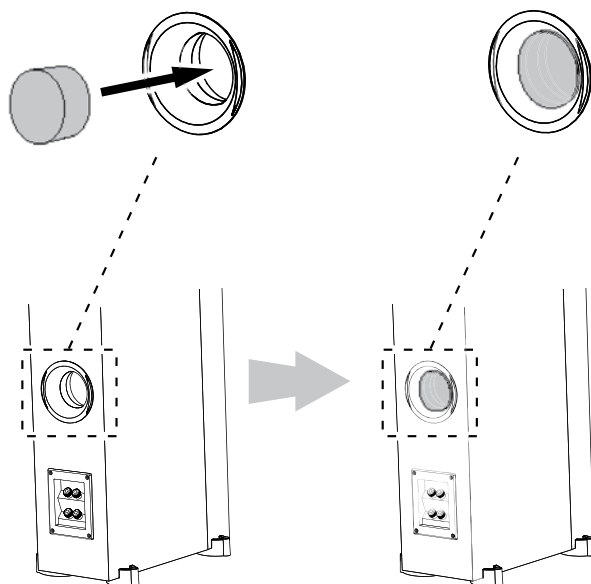


For more information about various speaker-wire and connection options, contact your local JBL dealer.

USING THE PORT TUBE INSERTS (ALL MODELS EXCEPT STUDIO 520C)

If, due to speaker placement or your room's acoustics, you feel that the speakers produce a bit too much bass output for your taste, you can use the provided port tube inserts to slightly reduce the speakers' output in the 50Hz – 100Hz region.

Insert the port tube insert about half way into the port tube opening as shown in the illustration. Be careful not to push the insert through the port tube and into the speaker cabinet.



NOTE: The Studio 590 has two port tubes and includes two port tube inserts.

CARING FOR YOUR SPEAKERS

- Wipe the cabinet with a clean, dry cloth to remove dust. Damp cloth may dull the cabinet's finish. Do not use volatile liquids such as benzene, paint thinner or alcohol on the cabinet.
- Do not spray insecticide near the cabinet.
- To remove dust from the grille fabric, use a vacuum cleaner set to low suction.
- Never apply suction or pressurized air to the horn opening.
- Do not wash the grilles in water, as it may fade the color or make it uneven.
- If the surfaces of the woofer cones become dusty, you can carefully sweep them clean with a soft, dry calligraphy brush or paint brush. Do not use a damp cloth.

SPECIFICATIONS

STUDIO 590 FLOORSTANDING SPEAKER

Speaker type:	2-1/2-way dual-woofer, floorstanding
Low-frequency transducer:	Two 8" (200mm) PolyPlas™ cones with Symmetrical Field Geometry™ magnet structures, cast frames and rubber surrounds, magnetically shielded
High-frequency transducer:	1" (25mm) compression driver with neodymium magnet and one-piece Teonex® diaphragm on a glass-filled ABS Bi-Radial® horn, magnetically shielded
Recommended amplifier power:	250 watts
Frequency response:	35Hz – 40kHz (–6dB)
Nominal impedance:	6 ohms
Sensitivity (2.83V/1m):	92dB
Crossover frequencies:	1.5kHz
Enclosure type:	Ported
Connector type:	Dual gold-plated binding posts (bi-wire capable)
Available finishes:	Black or cherry
Dimensions (H x W x D):	49-3/4" x 12-11/16" x 16-1/4" (1263mm x 322mm x 413mm)
Weight:	69.5 lb (31.5kg)

STUDIO 580 FLOORSTANDING SPEAKER

Speaker type:	2-way dual-woofer, floorstanding
Low-frequency transducer:	Two 6-1/2" (165mm) PolyPlas cones with Symmetrical Field Geometry™ magnet structures, cast frames and rubber surrounds, magnetically shielded
High-frequency transducer:	1" (25mm) compression driver with neodymium magnet and one-piece Teonex® diaphragm on a glass-filled ABS Bi-Radial® horn, magnetically shielded
Recommended amplifier power:	200 watts
Frequency response:	40Hz – 40kHz (–6dB)
Nominal impedance:	6 ohms
Sensitivity (2.83V/1m):	90dB
Crossover frequencies:	1.5kHz
Enclosure type:	Ported
Connector type:	Dual gold-plated binding posts (bi-wire capable)
Available finishes:	Black or cherry
Dimensions (H x W x D):	42-1/16" x 9-7/8" x 13-3/4" (1069mm x 250mm x 348mm)
Weight:	49 lb (22.2kg)

STUDIO 570 FLOORSTANDING SPEAKER

Speaker type:	2-way dual-woofer, floorstanding
Low-frequency transducer:	Two 5-1/4" (130mm) PolyPlas cones with Symmetrical Field Geometry™ magnet structures, cast frames and rubber surrounds, magnetically shielded
High-frequency transducer:	1" (25mm) compression driver with neodymium magnet and one-piece Teonex® diaphragm on a glass-filled ABS Bi-Radial® horn, magnetically shielded
Recommended amplifier power:	150 watts
Frequency response:	45Hz – 40kHz (–6dB)
Nominal impedance:	6 ohms
Sensitivity (2.83V/1m):	88dB
Crossover frequencies:	1.5kHz
Enclosure type:	Ported
Connector type:	Dual gold-plated binding posts (bi-wire capable)
Available finishes:	Black or cherry
Dimensions (H x W x D):	34-1/16" x 8-7/16" x 11-3/16" (896mm x 214mm x 284mm)
Weight:	34.4 lb (15.6kg)

STUDIO 530 BOOKSHELF SPEAKER

Speaker type:	2-way bookshelf
Low-frequency transducer:	5-1/4" (130mm) PolyPlas cone with Symmetrical Field Geometry™ magnet structure, cast frame and rubber surround, magnetically shielded
High-frequency transducer:	1" (25mm) compression driver with neodymium magnet and one-piece Teonex® diaphragm on a glass-filled ABS Bi-Radial® horn, magnetically shielded
Recommended amplifier power:	125 watts
Frequency response:	45Hz – 40kHz (–6dB)
Nominal impedance:	6 ohms
Sensitivity (2.83V/1m):	86dB
Crossover frequencies:	1.5kHz
Enclosure type:	Ported
Connector type:	Dual gold-plated binding posts (bi-wire capable)
Available finishes:	Black or cherry
Dimensions (H x W x D):	18-3/8" x 8-7/16" x 8-3/4" (467mm x 214mm x 222mm)
Weight:	17 lb (7.7kg)

STUDIO 520C CENTER-CHANNEL SPEAKER

Speaker type:	2-way dual-woofer, center-channel
Low-frequency transducer:	Two 4" (100mm) PolyPlas cones with Symmetrical Field Geometry™ magnet structures, cast frames and rubber surrounds, magnetically shielded
High-frequency transducer:	1" (25mm) compression driver with neodymium magnet and one-piece Teonex® diaphragm on a glass-filled ABS Bi-Radial® horn, magnetically shielded
Recommended amplifier power:	150 watts
Frequency response:	60Hz – 40kHz (–6dB)
Nominal impedance:	6 ohms
Sensitivity (2.83V/1m):	88dB
Crossover frequencies:	1.5kHz
Enclosure type:	Ported
Connector type:	Dual gold-plated binding posts (bi-wire capable)
Available finishes:	Black or cherry
Dimensions (H x W x D):	6-3/4" x 21-7/8" x 6-5/8" (172mm x 555mm x 168mm)
Weight:	16.6 lb (7.5kg)



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www.jbl.com

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