

# **CINEMA 500**

## Home theater speaker system



### **QUICK-START GUIDE**

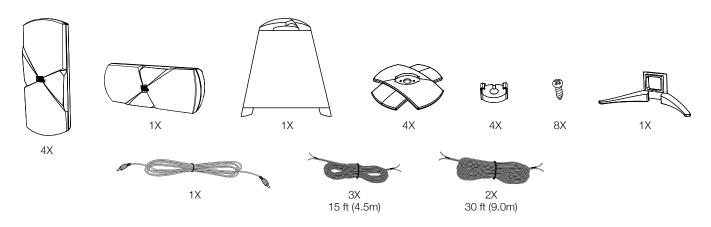
## THANK YOU FOR CHOOSING THIS JBL® PRODUCT

The Cinema 500 is a complete six-piece home theater speaker system that includes four identical, two-way, video-shielded satellite speakers, a dedicated, voice-matched, video-shielded center speaker with dual midrange drivers an 8-inch (203mm), 150-watt powered subwoofer and all of the cables you need to connect all of the speakers to your audio/video receiver or preamp/processor and amplifier.

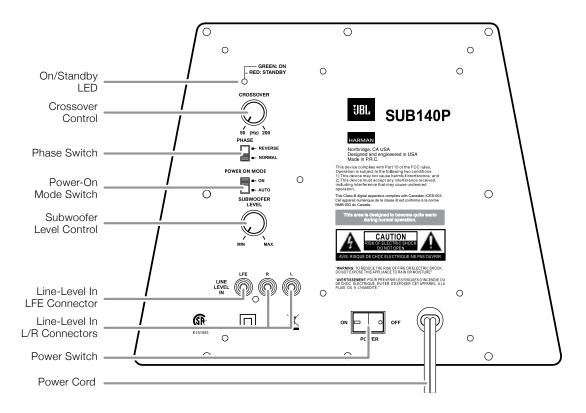
We're confident that this JBL system will provide every note of enjoyment that you expect – and that when you think about purchasing additional audio equipment for your home, car or office, you will once again choose JBL products.

This quick-start guide contains all the information you need to set up, connect and adjust your new speaker system. For more in-depth information, go to our Web site: www.jbl.com.

#### **INCLUDED ITEMS**



#### SUBWOOFER REAR-PANEL CONTROLS AND CONNECTIONS



**On/Standby LED:** When the Power-On Mode Switch is in the "Auto" position, this LED indicates whether the subwoofer is in the On or Standby state:

- $\bullet$  When the LED glows green, the subwoofer is turned on.
- When the LED glows red, the subwoofer is in the Standby mode.

When the Power Switch is set to "Off," the LED will not light up, no matter what setting the Power-On Mode Switch is in.

**Crossover Control:** This control determines the highest frequency at which the subwoofer reproduces sounds. The higher you set the Crossover Control, the higher in frequency the subwoofer will operate and the more its bass will "overlap" that of the satellite speakers. This adjustment helps achieve a smooth transition of bass frequencies between the subwoofer and the satellites for a variety of different rooms and subwoofer locations.

NOTE: The Crossover Control functions only when you are using the Line-Level In L/R Connectors. The Line-Level In LFE Connector bypasses the subwoofer's built-in crossover and Crossover Control.

**Phase Switch:** This switch determines whether the subwoofer driver's piston-like action moves in and out in phase with the satellite speakers. If the subwoofer were to play out of phase with the satellite speakers, the sound waves from the satellites could partially cancel out the sound waves from the subwoofer, reducing bass performance and sonic impact. This phenomenon depends in part on the placement of all the speakers relative to each other in the room.

**Power-On Mode Switch:** When this switch is set in the "Auto" position and the Power Switch is set to "On," the subwoofer will automatically turn itself on when it receives an audio signal and will enter the Standby mode when it has gone without receiving an audio signal for 20 minutes. When this switch is set in the "On" position, the subwoofer will remain on whether or not it is receiving an audio signal.

**Subwoofer Level Control:** Use this control to adjust the subwoofer's volume. Turn the knob clockwise to increase the volume; turn the knob counterclockwise to decrease the volume.

**Line-Level In LFE Connector:** This input bypasses the subwoofer's internal crossover circuitry, so use it only with a receiver or processor subwoofer output that has been low-pass filtered. If your receiver or processor does not have a dedicated subwoofer output that is low-pass filtered, use the subwoofer's Line-Level In L/R Connectors (see below) instead.

Use the supplied mono RCA cable (purple connectors) to connect the Line-Level In LFE Connector to the dedicated subwoofer output of a receiver or preamp/processor.

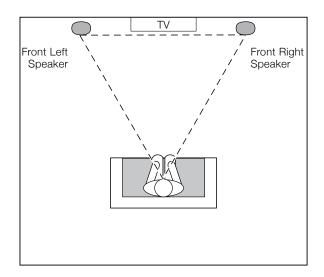
**Line-Level In L/R Connectors:** These inputs pass through the subwoofer's built-in crossover. Use them if your receiver or preamp/processor does not have a dedicated subwoofer output that is low-pass filtered.

**Power Switch:** Set this switch in the "On" position to turn the subwoofer on. The subwoofer will then be in On or Standby mode, depending on the setting of the Power-On Mode Switch.

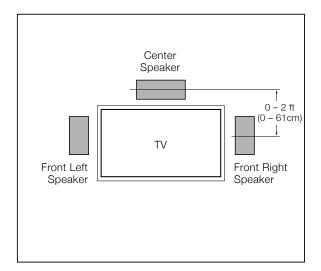
**Power Cord:** After you have made and verified all subwoofer and speaker connections described in this manual, plug the power cord into an active, *unswitched* electrical outlet for proper operation of the subwoofer. *DO NOT* plug this cord into the accessory outlets found on some audio components.

#### **PLACING THE SPEAKERS**

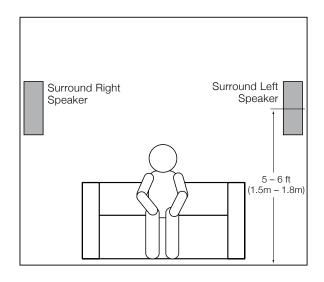
#### FRONT LEFT AND RIGHT SPEAKERS

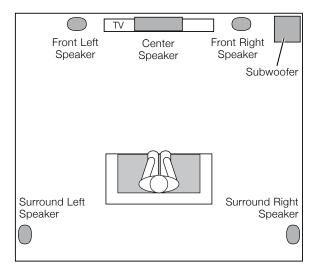


#### **CENTER SPEAKER**



#### **SURROUND SPEAKERS AND SUBWOOFER**

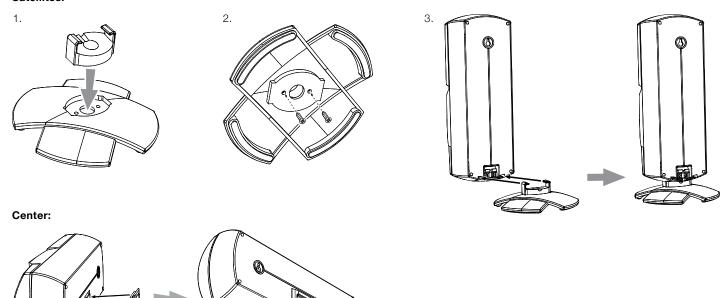




#### **SPEAKER MOUNTING OPTIONS**

#### **SHELF-MOUNTING**

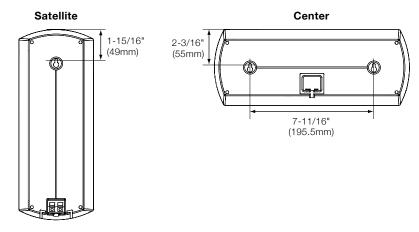
#### Satellites:



#### **WALL-MOUNTING**

**IMPORTANT SAFETY NOTE:** The customer is solely responsible for proper selection and installation of mounting hardware not included with the speakers. JBL disclaims any liability for the selection and installation of mounting hardware.

Be sure to follow these installation instructions carefully. If you have any questions or doubts about your ability to wall-mount the speakers correctly, consult with your authorized JBL dealer or custom installer.



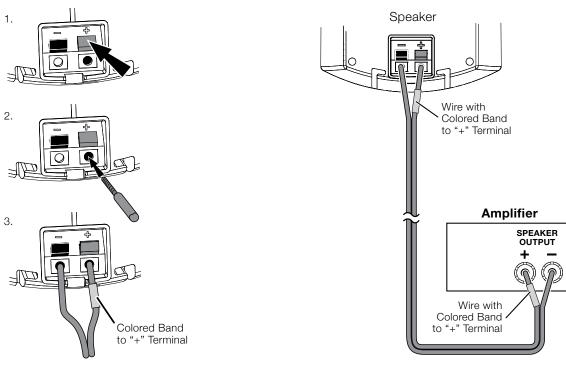
- 1. Decide on locations for the speakers according to the recommendations in *Placing the Speakers*, on page 3.
- Select wall-hanging hardware that is appropriate for the construction and materials of your walls. The Cinema 500 front, center and surround speakers weigh 3.25 lb (1.47kg) each. Be sure to use hardware that can support their weight.
- 3. Install the wall-hanging hardware on the walls. Make sure that the hardware is driven into studs and not into drywall or plaster. If the hardware must be mounted in drywall or plaster, you are responsible for selecting and using wall anchors that are appropriate for the construction and materials of your walls.
- 4. Hang the speakers on the wall-mount hardware.

#### **CONNECTING THE SPEAKERS**

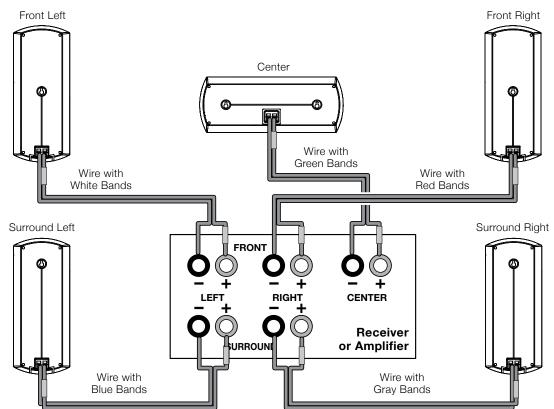
CAUTION: Before making speaker connections, be sure that your receiver or amplifier is turned off and preferably that its AC cord is unplugged from the AC power outlet.

Connect the speakers to your receiver or amplifier:

Connect the speaker's "+" terminal to the amplifier's "+" terminal:



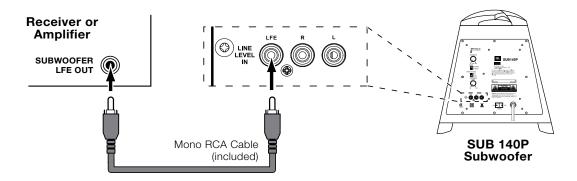
Connect the speakers to the proper amplifier channels:



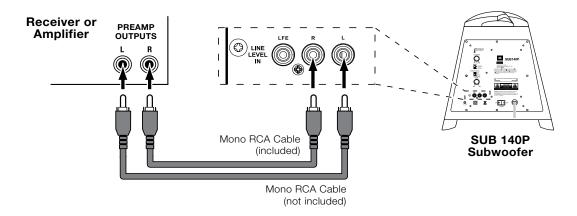
IMPORTANT: Make sure the ( + ) and ( - ) bare wires do not touch each other or the other terminal. Touching wires can cause a short circuit that can damage your receiver or amplifier.

#### **CONNECTING THE SUBWOOFER**

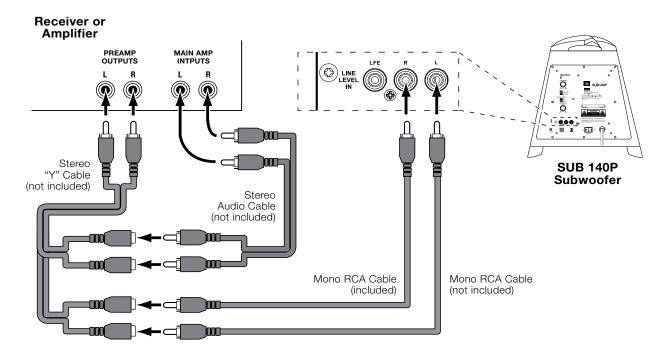
#### TO A RECEIVER OR PREAMP/PROCESSOR WITH A DEDICATED SUBWOOFER OUTPUT



#### TO A RECEIVER OR PREAMP/PROCESSOR WITH A PREAMP OUTPUTS



#### TO A RECEIVER OR PREAMP/PROCESSOR WITH A PREAMP OUTPUTS CONNECTED TO MAIN AMP INPUTS



#### **OPERATING THE SUBWOOFER**

#### **TURNING THE SUBWOOFER ON AND OFF**

Set the subwoofer's Power Switch to the "On" position.

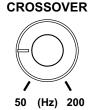
- If the subwoofer's Power-On Mode Switch is set to "Auto," the subwoofer will automatically turn itself on when it receives an audio signal, and it will go into Standby mode after it has received no audio signal for 20 minutes. The subwoofer's LED will glow *green* when the subwoofer is on and will glow *red* when the subwoofer is in Standby.
- If the Power-On Mode Switch is set to "On," the subwoofer will remain on at all times. The subwoofer's LED will glow green.

If you will not be using the subwoofer for an extended period – for instance, if you're going on vacation – set the Power Switch to the "Off" position.

#### SUBWOOFER ADJUSTMENTS: CROSSOVER CONTROL

NOTE: The Crossover Control functions only when you are using the Line-Level In L/R Connectors. The Line-Level In LFE Connector bypasses the subwoofer's built-in crossover and the Crossover Control.

The Crossover Control adjusts the subwoofer's built-in crossover between 50Hz and 200Hz. The higher you set the Crossover Control, the higher in frequency the subwoofer will operate and the more its bass will "overlap" that of the satellite speakers. This adjustment helps achieve



**SUBWOOFER** 

**LEVEL** 

a smooth transition of bass frequencies between the subwoofer and the satellites for a variety of different rooms and subwoofer locations.

To set the Crossover Control, listen for the smoothness of the bass. If the bass seems too strong at certain frequencies, try a lower Crossover Control setting. If the bass seems too weak at certain frequencies, try a higher Crossover Control setting.

#### SUBWOOFER ADJUSTMENTS: VOLUME

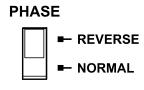
Use the Subwoofer Level Control to set the subwoofer's volume. Turn the knob clockwise to increase the subwoofer's volume; turn the knob counterclockwise to decrease the volume. Once you have balanced the subwoofer's volume with that of the other speakers in your system, you shouldn't have to change it.

#### Notes on Setting Subwoofer Volume:

- Sometimes the ideal subwoofer volume setting for music is too loud for films, while MIN MAX the ideal setting for films is too quiet for music. When setting the subwoofer volume, listen to both music and films with strong bass content and find a "middle ground" volume level that works for both.
- If your subwoofer always seems too loud or too quiet, you may
  want to place it in a different location. Placing the subwoofer in a
  corner will always tend to increase its bass output, while placing it
  away from any walls or corners will always tend to lessen its bass
  output.

#### SUBWOOFER ADJUSTMENTS: PHASE

The Phase Switch determines whether the subwoofer driver's piston-like action moves in and out in phase with the satellite speakers. If the subwoofer were to play out of phase with the satellite speakers, the sound waves from the satellites could partially cancel out the waves from the subwoofer,



reducing bass performance and sonic impact. This phenomenon depends in part on the placement of all the speakers relative to each other in the room.

Although in most cases you should leave the Phase Switch in the "Normal" position, there is no absolutely correct setting for the Phase Switch. When the subwoofer is properly in phase with the satellite speakers, the sound will be clearer and have maximum impact, and percussive sounds like drums, piano and plucked strings will sound more lifelike. The best way to set the Phase Switch is to listen to music that you know well and to set the switch in the position that gives drums and other percussive sounds maximum impact.



#### **SPECIFICATIONS**

#### **CINEMA 500 SYSTEM**

Frequency response:	32Hz – 20kHz (–6dB)	

#### **CINEMA 500 SATELLITE SPEAKERS**

Low-frequency transducer:	Two 3" (75mm) PolyPlas™ cone, video-shielded
High-frequency transducer:	1" (25mm) titanium-laminate dome, video-shielded
Recommended amplifier power:	100 watts
Nominal impedance:	8 ohms
Sensitivity (2.83V/1m):	86dB
Crossover frequency:	3.7kHz
Enclosure type:	Sealed
Connector type:	Push-spring terminal
Dimensions (H x W x D):	11-3/8" x 4-3/4" x 3-3/8" (289mm x 121mm x 86mm)
Weight:	3.2 lb (1.45kg)

#### **SUB140P SUBWOOFER**

Low-frequency transducer:	8" (200mm) cone (down-firing)
Enclosure type:	Ported (down-firing)
Amplifier power:	150 watts
Frequency response:	32Hz - 150Hz (-6dB)
Audio controls:	Volume level, phase, crossover frequency
Connections:	LFE input, left and right RCA line-level inputs
Power requirement:	120V/60Hz, 150W (US); 220V – 240V/50Hz, 150W (EU)
Power consumption:	<1W (8mA@120V) standby; 300w (2.5A@120V) peak
Dimensions (W x H x D):	19" x 14" x 14" (483mm x 355mm x 355mm)
Weight:	22 lb (10kg)

#### **CINEMA 500 CENTER SPEAKER**

Low-frequency transducer:	Two 3" (75mm) PolyPlas cones, video-shielded
High-frequency transducer:	1" (25mm) titanium-laminate dome, video-shielded
Recommended power handling:	100 watts
Nominal impedance:	8 ohms
Sensitivity (2.83V/1m):	89dB
Crossover frequency:	3.7kHz
Enclosure type:	Sealed
Connector type:	Push-spring terminal
Dimensions (H x W x D):	4-7/8" x 12" x 3-3/8" (124mm x 305mm x 86mm)
Weight:	3.2 lb (1.45kg)



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