



PRIMACY[®] S3 ACTIVE LOUDSPEAKER



Installation Instructions

Important Safety Information

⚠ WARNING

See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

This device must be installed according to these instructions. Failure to install this device in accordance with these instructions could result in serious personal injury, damage to the device, or poor product performance.

To reduce the risk of fire or electric shock, do not remove the amplifier panel or the speaker panel. This product is not user-serviceable. Refer to qualified personnel for repairs or maintenance.

To reduce the risk of device damage, electric shock, or personal injury, power the device only with the electrical supply and type as described on the device.

To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.

This device is supplied with a grounded power cord. Precautions should be taken so that the grounding means of the product are not defeated. Defeating the grounding prong of the device's power cord could increase the risk of electric shock and could result in permanent damage to the product's electronics.

To avoid possible serious personal injury or damage to the device, disconnect the power cord during installation of the device.

Handle with care, especially when positioning the device before normal use or when relocating for service. Failure to use caution when positioning the device could cause the device to tip, resulting in crushed body parts or other severe injury.

Continuous exposure to sound pressure levels over 100 dBA may cause permanent hearing loss. The volume is typically too loud if you cannot hear people speaking around you. Limit the amount of time you listen at high volume. If you experience ringing in your ears or muffled speech, stop listening and have your hearing checked.

This product contains magnets that may interfere with medical devices. Consult your physician and medical device manufacturer with questions.

⚠ CAUTION

For best possible performance and to avoid potential injury, damage to the device, or other property damage, installation by a professional installer is recommended.

NOTICE

The product contains magnets that may cause damage to some electronic devices. Use caution using the product near electronic devices.

This device is intended for consumer use in indoor applications only.

Do not use the device near water, such as a bathtub, sink, swimming pool, or in a wet basement.

Do not place objects on or around the device that may impede airflow ventilation or its ability to dissipate heat. Examples include tablecloths, drapes, curtains, or other furniture. Doing so may lead to overheating and product damage.

Do not position the device near other sources of heat, such as radiators, heat registers, stoves, or fireplaces.

During normal operation, the device should be placed on a level surface to avoid instability.

When selecting a suitable location for the speaker, make sure the full weight of the speaker can be supported.

Route all cables and the power supply cord to avoid being walked on or pinched by items placed upon or against them.

We strongly recommend to disconnect the device from the electrical outlet during electrical storms and recurring power interruptions to prevent damage due to power surges.

Do not place objects filled with liquids on top of or near the device. For example, flower vases, beverages, air fresheners, liquid-fueled lamps, and so on.

You must read all installation instructions before beginning the installation. If you experience difficulty during the installation, go to support.garmin.com for product support.

Introduction

Companion Primacy® Centerpiece Stereo

This speaker is designed to be used with the Primacy Centerpiece Stereo (CS) to achieve its full potential and capabilities. Connecting to the Primacy CS enables advanced speaker setup and enhanced configuration settings using the Primacy Desktop and Primacy Mobile applications.

NOTE: Connect only Primacy speakers to the Dante® speaker outputs of the Primacy CS. Connecting to any speakers other than Primacy speakers may lead to poor product performance or incompatibility.

NOTE: When configured using a Primacy application, most physical switch and dial controls on the Primacy speaker's rear panel are deactivated and control transfers to the Primacy application. Refer to the documentation included with the Primacy CS for additional information.

For compatibility with traditional audio hardware, this speaker includes conventional analog (RCA and XLR) inputs located on the rear panel.

Primacy® Applications

You must download the Primacy Desktop or Primacy Mobile application on your compatible computer or phone before you can configure the settings of your Primacy CS.

Connecting your Primacy CS to an application allows you to use the following features.

- Set up and configure a Primacy CS
- Pair and configure a Primacy remote
- Set up and configure system settings
- Create and assign independent user profiles
- Perform Primacy Automatic Room Optimization (P.A.R.O.) calibrations (using Primacy Desktop only)
- Display streaming audio sources with album art and media controls
- Configure source selection with user profile assignment
- Adjust volume and control media
- Configure accent lighting color for the Primacy CS, remote, and speakers
- Initiate system firmware updates

For information about the Primacy Desktop application for your Windows® or Mac® computer, go to garmin.com.

For information about the Primacy Mobile application for your compatible phone, go to the Apple® App StoreSM or the Google Play™ store.

Installation Considerations

Primacy® Speaker Placement:

The placement of your speakers can greatly impact the in-room response and affect the amount of work the P.A.R.O. system must perform to achieve its targets.

- If you are installing the speaker with the optional floor stand accessory, you should consider the floor type when choosing the speaker's final location and install the appropriate floor spikes suitable for your speaker's floor type, if necessary. Refer to the documentation included with the Primacy floor stands for additional information.
- Each speaker interacts with the room's boundaries independently, so symmetrical positioning of the left and right speakers is preferred.
- Furniture, walls, floors, and ceilings should be at similar distances from the speakers.
- You should apply acoustic treatment as needed to absorb or diffuse reflection points.

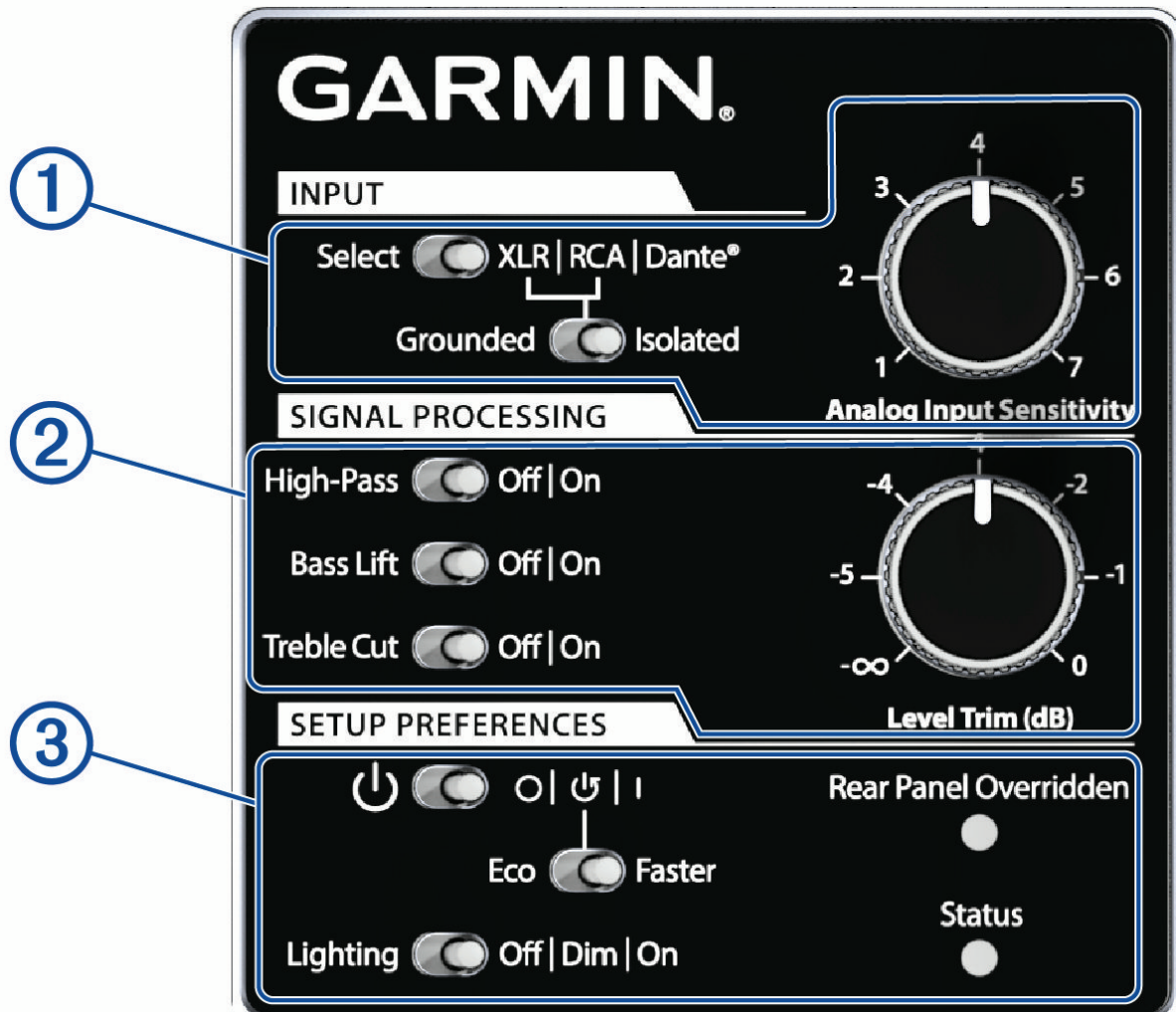
Primacy CS Placement:

- You must place the Primacy CS near the listening area to allow placement of the included calibrated microphone at the main listening position. The cable length of the included calibrated microphone is 9 m (30 ft.).

TIP: If the distance between the Primacy CS and the main listening position exceeds the length of the included calibrated microphone cable, temporarily move the Primacy CS closer to the speakers to perform the P.A.R.O. calibration process.

- You must connect your Primacy speakers to the Dante® speaker outputs of your Primacy CS.
- See the documentation included with the Primacy CS for additional information.

Settings Panel Identification



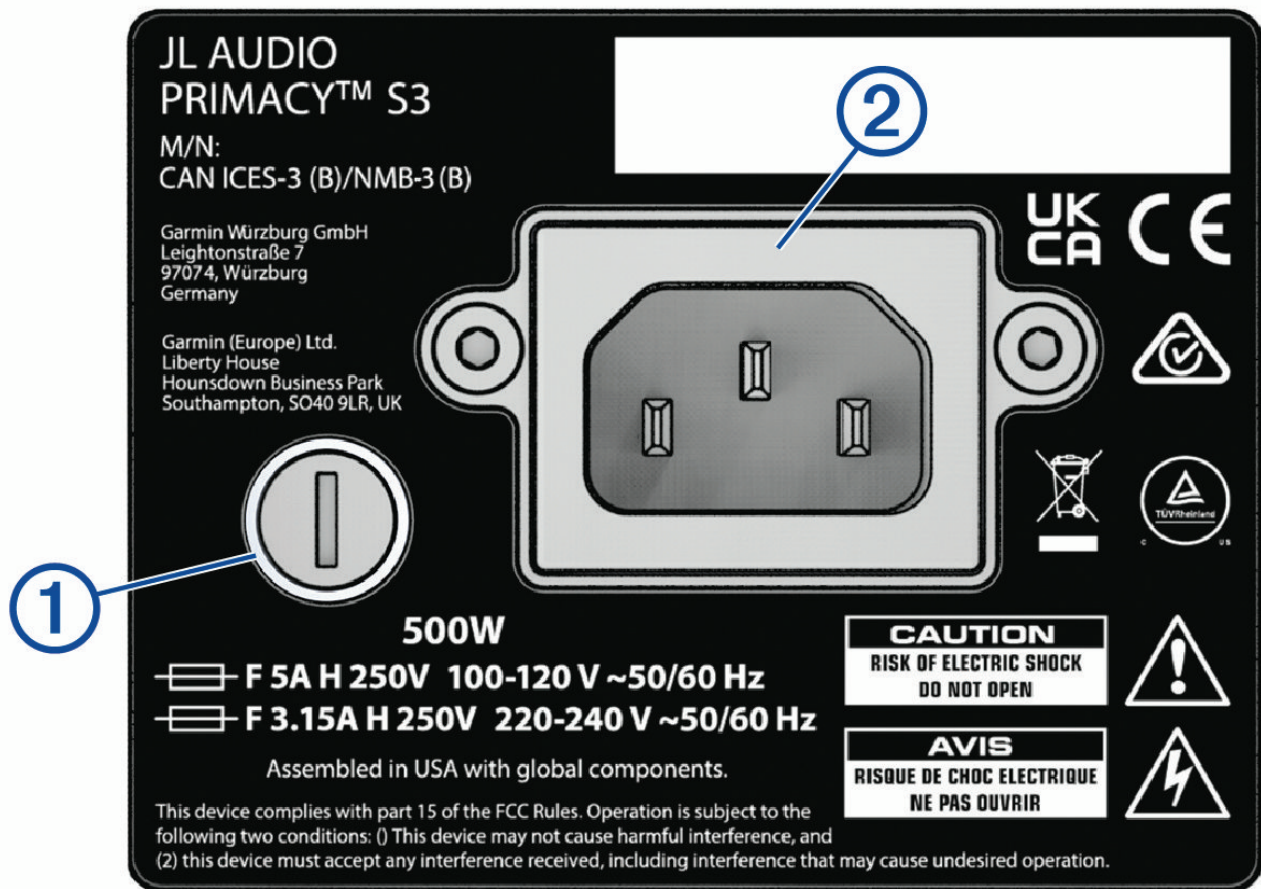
<p>① Input settings (Input Settings, page 7)</p>	<ul style="list-style-type: none"> • XLR RCA Dante®: Sets which input is active • Grounded/Isolated: Sets the input grounding method when used with the analog inputs (XLR and RCA) to facilitate quiet, hum-free operation with other connected audio equipment • Analog Input Sensitivity: Adjusts the input level for both analog inputs (XLR and RCA)
<p>② Signal processing settings (Signal Processing Settings, page 7)</p>	<ul style="list-style-type: none"> • High-Pass: Activates the internal, active high-pass filter • Bass Lift: Activates the internal, active shelf filter to gently boost the low-frequency response • Treble Cut: Activates the internal, active shelf filter to attenuate the upper-frequency response • Level Trim (dB): Allows fine adjustment of the speaker's output level
<p>③ Setup preferences (Setup Preferences, page 7)</p>	<ul style="list-style-type: none"> • Power switch: Sets the method used to turn on the speaker • Eco / Faster: Sets the operation preference of the auto turn-on mode • Lighting: Sets the lighting intensity of the top panel LED trim • Rear Panel Overridden: LED indicates when the rear panel settings are disabled and under control by a connected Primacy® CS • Status: Multicolor LED indicates the speaker's status and operating condition (Status LED, page 8)

Connections Panel Identification



① Dante® NETWORK	Two RJ45 ports with status LEDs connected to an internal network switch for Dante standard network connections
② 12V Trigger	Dual 12-volt mini jacks to activate the speaker with a trigger signal (In) and turn on other components with an output signal (Out). Both jacks accept standard 3.5 mm (1/8 in.) plugs with 12 volts DC connected to the tip conductor and ground connected to the ring or sleeve conductor.
③ Expansion port (behind cover)	44-pin D-sub connection for future expansion
④ USB-C® (behind cover)	USB-C connection for diagnostics and configuration using a computer with the Primacy® Desktop application.
⑤ DFU button (behind cover)	Hold for seven seconds to reset the speaker to its original factory default state. NOTE: This erases all saved speaker settings.
⑥ Reset button (behind cover)	Press to restart the speaker.
⑦ ANALOG INPUTS	<ul style="list-style-type: none"> • RCA Unbalanced: RCA input • XLR Balanced: XLR input

Power Connection Panel Identification



①	Main fuse holder location (Main Fuse Holder , page 10)
②	IEC-Style AC power connector

Connecting the Power Cable

⚠ CAUTION

Use the included power cable only. Do not attempt to use a third-party power cable because this could lead to personal injury or property damage.

NOTICE

Do not plug the power cable into a switched power outlet or power strip because this could cause damage or poor performance. A high quality surge protector may be used.

- 1 Plug the power cable into the AC power connector on the speaker.
- 2 Plug the other end of the power cable into a standard, 3-prong grounded wall outlet.

Analog Input Considerations

For compatibility with traditional audio hardware, this speaker includes both balanced (XLR) and unbalanced (RCA) input connection types. When connecting the input of the speaker, make sure to observe these considerations.

NOTE: When configured using a Primacy® application, the speaker's analog inputs are deactivated.

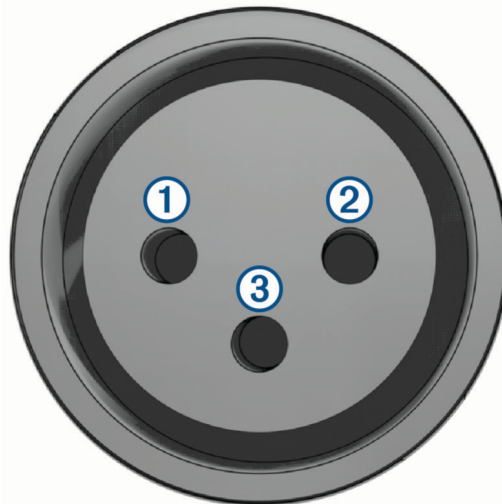
XLR or Balanced Input

Balanced connections are used extensively in professional studios and sound reinforcement applications. In addition to ensuring proper grounding between components, balanced signal transmission cancels induced cable noise from the surrounding environment, which is particularly important with long signal cable lengths. Balanced input impedance is 50 kohms.

This speaker is outfitted with a balanced input connection using an XLR jack. This type of jack accepts a three-pin male XLR connector for compatibility with a wide range of equipment.

The XLR jack is configured according to Audio Engineering Society® recommendations for balanced signal cables.

Pin ①: Shield, Pin ②: Positive, Pin ③: Negative



RCA or Unbalanced Input

Unbalanced RCA jacks are the most commonly used connector type for home audio applications and should be used if your signal source does not provide balanced outputs. Unbalanced input impedance is 50 kohms.

The RCA jack is configured according to industry standards for unbalanced signal cables.

Tip: Positive, Sleeve: Negative

Configuration Controls

The rear panel has controls you may use to configure the operation of the speaker ([Settings Panel Identification, page 3](#)).

Input Settings

Dial or Switch	Function										
XLR RCA Dante®	<p>XLR: Select only when using an XLR Balanced input.</p> <p>RCA: Select only when using an RCA Unbalanced input.</p> <p>Dante: Select only when using the NETWORK inputs.</p> <ul style="list-style-type: none"> The two RJ45 network ports are connected to an internal switch. You may connect to either port. The switch allows you to easily connect multiple speakers together in a linear series, commonly called a daisy chain. 										
Grounded/ Isolated	Sets the input grounding method when used with the analog inputs (XLR and RCA) to facilitate quiet, hum-free operation with other connected audio equipment. This feature addresses signal grounding issues often encountered in audio systems when several components from different manufacturers are interconnected. Use whichever switch position provides the least hum or noise.										
Analog Input Sensitivity	<p>Adjusts the input level of the analog inputs (XLR and RCA).</p> <table border="1"> <tr> <td>Each dial position corresponds to specific input signal voltages:</td> <td></td> </tr> <tr> <td>1: 8.0V (+18 dBV)</td> <td>4: 1.0V (0 dBV)</td> </tr> <tr> <td>2: 4.0V (+12 dBV)</td> <td>5: 0.63V (-4 dBV)</td> </tr> <tr> <td>3: 2.0V (+6 dBV)</td> <td>6: 0.45V (-7 dBV)</td> </tr> <tr> <td></td> <td>7: 0.32V (-10 dBV)</td> </tr> </table> <p>The dial's LED indicates various input level conditions.</p> <ul style="list-style-type: none"> Solid green: No clipping Solid orange: Clipping approached Flashing red: Clipping; turn the dial's position counterclockwise until the LED is green or orange 	Each dial position corresponds to specific input signal voltages:		1: 8.0V (+18 dBV)	4: 1.0V (0 dBV)	2: 4.0V (+12 dBV)	5: 0.63V (-4 dBV)	3: 2.0V (+6 dBV)	6: 0.45V (-7 dBV)		7: 0.32V (-10 dBV)
Each dial position corresponds to specific input signal voltages:											
1: 8.0V (+18 dBV)	4: 1.0V (0 dBV)										
2: 4.0V (+12 dBV)	5: 0.63V (-4 dBV)										
3: 2.0V (+6 dBV)	6: 0.45V (-7 dBV)										
	7: 0.32V (-10 dBV)										

Signal Processing Settings

Dial or Switch	Function
High-Pass	The high-pass filter attenuates frequencies below 80 Hz, at a rate of 24 dB/octave.
Bass Lift	Tone adjustment to slightly increase the low frequency level.
Treble Cut	Tone adjustment to slightly decrease the high frequency level.
Level Trim (dB)	<p>Allows fine adjustment of the speaker's output level, from 0 to -5 dB and muted (-∞).</p> <ul style="list-style-type: none"> The dial's LED flashes orange when set to the mute (-∞) position.

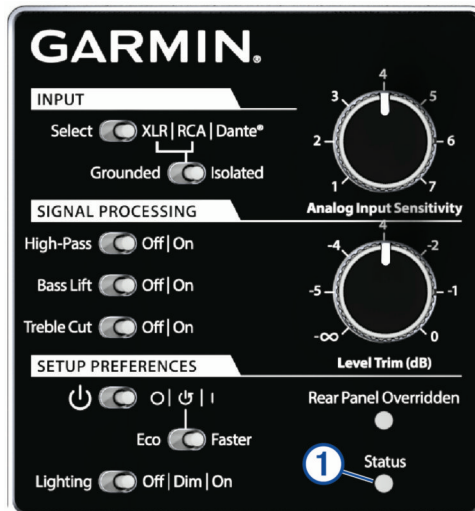
Setup Preferences

Switch or LED	Function
	<p>Sets the method used to turn on the speaker.</p> <p>○: The speaker is off and in standby mode.</p> <ul style="list-style-type: none"> This minimizes power consumption but requires more time to turn on. <p>⏻: The speaker turns on automatically when any of the wake sources are activated and turns off when all of the wake sources are removed.</p> <ul style="list-style-type: none"> Wake sources include the 12V remote trigger, analog audio, expansion port, and connectivity from the Primacy® app. When XLR or RCA inputs are selected, the speaker remains on for twenty minutes after the signal is last detected. When the rear panel controls are overridden, all wake sources are disabled, except for the Dante® network interface turn-on command. <p> : The speaker is on and in idle mode.</p>
Eco/ Faster	<p>Sets the turn-on behavior whenever the power switch is set to ⏻ (automatic).</p> <p>Eco: The speaker enters sleep mode and requires around 20 seconds to turn on.</p> <p>Faster: The speaker enters standby mode and requires around 7 seconds to turn on.</p>
Lighting	<p>Sets the lighting intensity of the top panel LED trim.</p> <p>Off: The LED trim is off.</p> <p>Dim: The LED trim illuminates at 50% brightness.</p> <p>On: The LED trim illuminates at 100% brightness.</p>

Switch or LED	Function
Rear Panel Overridden	<p>This red LED turns on after the speaker has been connected to the Primacy Desktop application or the Primacy Mobile application using the Primacy CS. When connected to a Primacy application, most physical switch and dial controls on the speaker's rear panel deactivate and no longer function. The speaker's settings and controls are transferred to the Primacy CS (<i>Companion Primacy® Centerpiece Stereo, page 2</i>).</p> <ul style="list-style-type: none"> The power switch and Eco/Faster switch remain active and continue to function. When the rear panel controls are overridden, a change to any of the switch positions causes the red LED to flash three times. To reactivate the rear panel controls, you must reset the speaker to its original factory default settings (<i>Connections Panel Identification, page 4</i>).
Status	This multicolor LED reports the speaker's status and operating condition (<i>Status LED, page 8</i>).

Status LED

The rear panel's multicolor Status LED ① reports the speaker's operational condition.



LED Activity	Status
White	The speaker is fully powered and operational.
Amber	The speaker is in a network standby state to reduce power consumption, but it can still be controlled by the Primacy® CS and Primacy applications.
Blue	The status LED may momentarily change to blue as the speaker transitions between the full power and network standby states.
Violet	The speaker is in firmware update mode. This safe operational state allows firmware updates using the Primacy applications.
Red	The speaker has encountered a critical fault and has entered a safe mode. Go to support.garmin.com for product support.
Flashing (any color)	This indicates a system fault condition. Go to support.garmin.com for product support.

Speaker Trim Removal

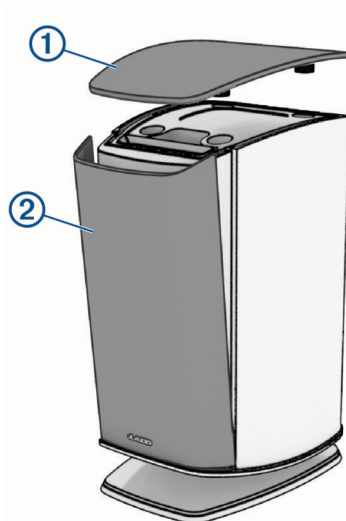
The speaker's trim parts can be removed for cleaning (*Cleaning the Speaker, page 10*) or to install optional accessory side panels.

Removing the Grille

NOTICE

Do not remove the grille without first removing the top panel because this could cause damage to the grille or top panel.

- Lift the top panel ① upward to remove it.



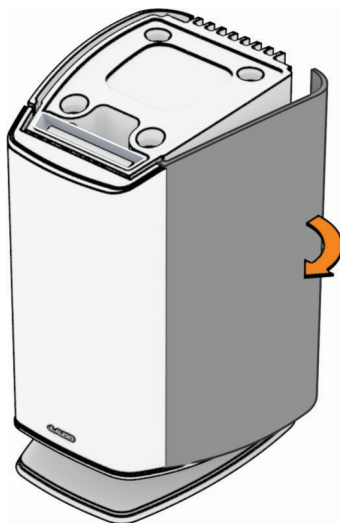
- 2 Gently grasp the top edge ② of the grille and pull it forward away from the speaker.

Removing the Side Panels

NOTICE

Do not remove the side panels without first removing the top panel because this could cause damage to the side panels.

- 1 Remove the top panel (*Removing the Grille, page 8*).
- 2 Pull the side panel along its rear edge to partially lift it away from the speaker.



- 3 With the rear of the side panel lifted away from the speaker, grasp the top and bottom of the side panel and gently pull it away from the speaker.



More Information

Cleaning the Speaker

You should dust your speaker using a feather duster or clean microfiber cloth. You can usually wipe off light smudges on the speaker's top and side panels with a clean microfiber cloth. For stubborn smudges, you should polish and protect the finish using a high-quality automotive wax. For ease of cleaning, you can remove the speaker's trim parts ([Speaker Trim Removal](#), page 8).

Main Fuse Holder

⚠ WARNING

To avoid possible serious injury, disconnect the power cord before removing the main fuse holder.

NOTICE

When replacing the fuse, make sure to replace it with the same fuse type and value as listed on the power connection panel label. Failure to do so may result in damage to the speaker and will not be covered under warranty.

The main fuse holder cover is located on the rear panel, next to the AC power connector. This small spring-loaded cap may be removed, allowing access to inspect or replace the main power fuse.

Removing the Fuse Holder

- 1 Insert a small flathead screwdriver into the cap's slot, and turn the cap counter-clockwise slowly until the fuse holder releases.
- 2 Inspect the fuse and replace it, if necessary.

NOTE: If fuses blow repeatedly, the speaker may need service. Go to support.garmin.com for product support.

Installing the Fuse Holder

NOTICE

When replacing the fuse, make sure to align the fuse holder's body with the opening so it fits properly.

- 1 Insert the fuse holder into the opening.
- 2 Gently press a small flathead screwdriver into the cap's slot and turn clockwise (about $\frac{1}{4}$ turn) to lock in place.

Troubleshooting

Before you contact your JL Audio® dealer or service center, you should refer to the following information to help diagnose the problem.

If the JL Audio product has been installed by a professional installer, you should contact the installer so a technician can assess the problem and advise you about possible solutions.

No sound from the speaker

- Verify that the input source component is selected, active, and not muted.
- Verify that all power cables are plugged in at both ends of the Primacy® CS and speakers.
- Verify that the Primacy CS and speakers are turned on.
- Verify that the circuit breaker is enabled for the wall outlets that the power cables are plugged in to.
- Verify that all remaining cables are plugged in correctly.
- Verify that your speaker's turn-on settings have not changed.
- Verify that all **Level Trim (dB)** dials of your Primacy speakers are not set to the mute (-∞) position.
- Verify that the settings of the Primacy Desktop or Primacy Mobile applications are configured properly.

Specifications

General

Design	Bookshelf or stand-mounted, 2-way active loudspeaker with DSP and discrete internal woofer and tweeter amplifiers
Construction	Primary enclosure: cast aluminum alloy with secondary machining Front baffle: extruded and machined aluminum
Enclosure type	Tweeter: sealed assembly Woofer: bass-reflex design vented at the base of the primary cast aluminum alloy enclosure
Drivers	Tweeter: carbon fiber dome, 26 mm (1 in.) Woofer: mineral-filled polypropylene cone, 140 mm (5.50 in.)
Shipping weight	41 kg (90 lb.)
Net weight	39 kg (82 lb.)

Amplifiers

Total continuous rated amplifier power, with less than 0.05% THD+N ¹	400 W RMS
Tweeter amplifier power	200 W RMS at 6 ohms
Woofer amplifier power	200 W RMS at 6 ohms

Digital Signal Processing and Conversion

Analog to digital converters	ESS™ SABRE® ES9822PRO (operating in mono mode)
Digital signal processor	AKM® triple-core with VELVET SOUND® technology processing at 32 bit/192 kHz for local system volume, crossovers, delays, equalization, and dynamics for each amplifier and driver section
Processing bit depth/resolution	32 bit / 192 kHz
Crossover frequencies/slope	3 kHz, 24 dB/octave Linkwitz-Riley
Digital to analog converters	ESS SABRE Reference DAC x 2 (operating in mono mode)

Primacy® Automatic Room Optimization (P.A.R.O.)

Measurement engine	Dual FFT measuring time, frequency and amplitude
Measured results	Frequency response (RTA, magnitude), impulse response (Lin IR, Log IR, ETC IR), and phase
Computer requirements	Computer running the Primacy Desktop application: Windows® 10 (OS Build 1809 or later), 11 Mac® OS 14, 15, 26

Rear Panel Controls and Indicators

Power mode	Off, Auto, or On
Auto power mode	Eco or Faster
Lighting	Off, Dim, or On Top panel accent light with user adjustable brightness levels. Displays active profile or user-defined color when connected to the Primacy centerpiece.

¹ This rating was not tested under the FTC standard.

Rear panel override	LED indicates when the rear panel settings are disabled and under control by a connected Primacy centerpiece.
Status	Multicolor LED indicates the speaker's status and operating condition.
Analog input grounding	Grounded or isolated
Analog input sensitivity	Rotary dial with the following input signal voltages: 1: 8.0V (+18 dBV) 2: 4.0V (+12 dBV) 3: 2.0V (+6 dBV) 4: 1.0V (0 dBV) 5: 0.63V (-4 dBV) 6: 0.45V (-7 dBV) 7: 0.32V (-10 dBV)
High-pass filter	80 Hz @ 24 dB/octave (Off/On)
Bass lift filter	+3 dB shelving filter @ 117 Hz, Q=0.4 (Off/On)
Treble cut filter	-2 dB shelving filter @ 3780 Hz, Q=0.85 (Off/On)
Output level trim	Mute to 0 dB (-1 dB steps)
Expansion port USB-C® DFU Reset	Service controls (Connections Panel Identification, page 4)

Network Digital Audio Transport

Protocol	Dante® audio over IP
Standard	IEEE802.3 compliant (1000BASE-T)
Connections	RJ45 x 2 (supports daisy chain speaker connections)
Bit depth/resolution	1CH @ 32 bit / 192 kHz

Balanced Analog Input (XLR)

Input impedance	50 kohms
Pin configuration	Pin 1: shield Pin 2: positive Pin 3: negative
Input Pin 1 ground lift	Via Grounded/Isolated switch
Analog input sensitivity at position 4 with level trim at 0	0.270 V

Unbalanced Analog Input (RCA)

Input impedance	50 kohms
Input ring ground lift	Via Grounded/Isolated switch
Analog input sensitivity at position 4 with level trim at 0	0.270 V

Acoustical

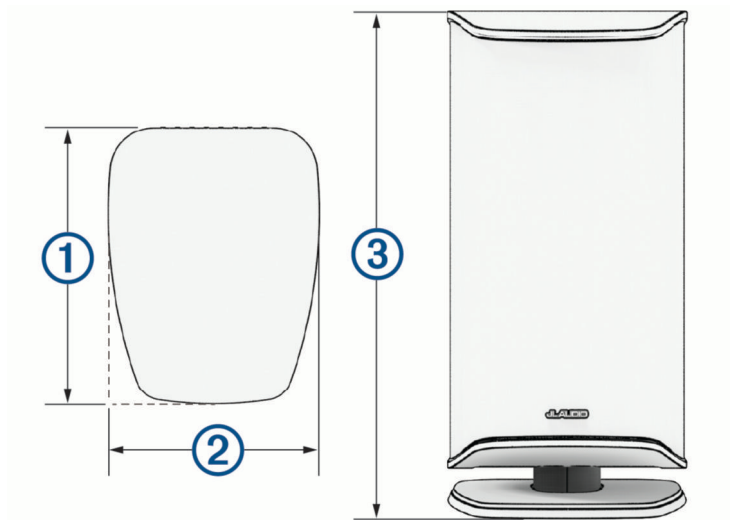
Maximum peak short term sine wave acoustic output, averaged from 100 Hz to 3 kHz @ 1m, half space	>112 dB SPL
Factory target calibration	Calibrated to achieve ±1.5 dB to reference response
Anechoic frequency response	55 Hz to 20kHz, +/- 2 dB, -3 dB @ 44 Hz, -6 dB @ 36 Hz
Latency (at the speaker's analog input)	4.46 ms

Electrical

Mains voltage	100 to 240V AC, 50/60 Hz
Power supply design	Worldwide voltage compatibility with synchronized regulated switching power supply.

Fuse type/value	120V version: 5 A, 250V, 3AB fast acting, 0.25 in. ceramic cartridge 240V version: 3.15 A, 250V, 3AB fast acting, 5 x 20 mm glass cartridge
Power cord	Detachable IEC style 120V: 18 AWG, 10 A 240V: 17 AWG, 10 A
Standby power consumption	Auto power switch with Eco mode: <0.5 W Auto power switch with Faster: <7.0 W
Idle power consumption (active with no signal)	120V: approx. 34 W 240V: approx. 40 W
Active power consumption (on with signal, 80 dB SPL. @ 1m, C-weighted)	120V: approx. 35 W 240V: approx. 41 W
12V Trigger	12V DC input, 3.5 mm (1/8 in.) jack, tip positive 12V DC output, 3.5 mm (1/8 in.) jack, tip positive, 50 mA max. load

Dimensions



①	343 mm (13.50 in.)
②	257 mm (10.10 in.)
③	526 mm (20.70 in.)

© 2026 Garmin Ltd. or its subsidiaries

Garmin®, the Garmin logo, JL Audio®, and Primacy® are trademarks of Garmin Ltd. or its subsidiaries, registered in the USA and other countries. These trademarks may not be used without the express permission of Garmin.

Audio Engineering Society® is a registered trademark of Audio Engineering Society, Inc. Apple® and Mac® are trademarks of Apple Inc., registered in the U.S. and other countries and regions. Dante® is a registered trademark of Audinate Group Limited. ESS™ is a trademark of ESS Technology, Inc. Google™, Google Play™, and Android™ are trademarks of Google Inc. SABRE® is a registered trademark of ESS Technology, Inc. Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.

MN: A0P3361