

REVEL®

PERFORMA³™

B112V2/B110V2 Subwoofer

Quick Start Guide

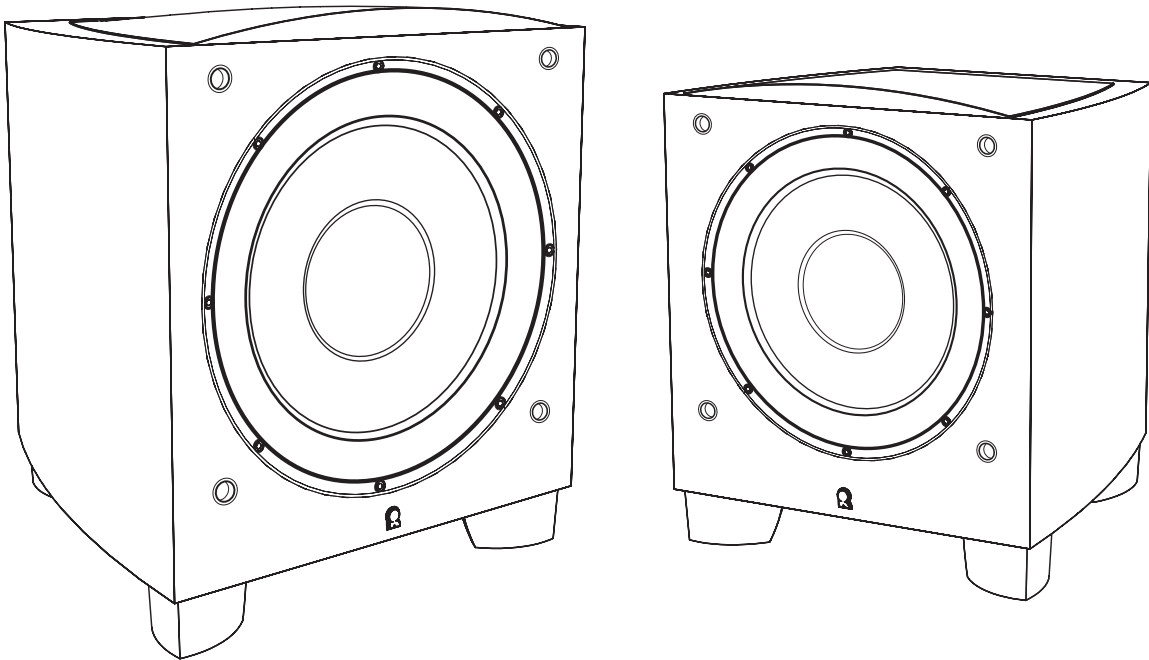


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ABOUT REVEL PERFORMA3 V2 SUBWOOFERS

Thank you for purchasing a Revel Performa3 V2 subwoofer. The B112V2 and B110V2 are powered by a 1,000-watt RMS (2,000-watt peak) internal amplifier and feature a custom-designed transducer that combines a new level of low frequency detail, musicality and refinement with unprecedented brute-force visceral impact. The internal amplifier's high power with an integrated Parametric Equalization (PEQ) system results in a new standard of high fidelity bass performance for home entertainment systems.

The B112V2 and B110V2 feature 12-inch and 10-inch versions, respectively, of a brand-new coated paper/pulp low-frequency transducer that has been designed specifically for use in these two subwoofer models. The primary design goal for this new driver was to produce very low frequencies at extremely high sound pressure level (SPL) while at the same time maintaining extremely low distortion – qualities that are usually mutually exclusive. This new unit maintains a precise engineering balance between the voice coil, spider and surround that produces linear motion of all three for lower distortion by incorporating Klippel-optimized, high-linearity motor geometry:

- The extremely long (50mm) two-layer copper voice coil wound on a high heat-tolerant fiberglass former gives this transducer a very large range of travel (Xmax) for dramatically increased output with low distortion.
- A high-temperature Nomex® spider features a progressive roll design that evenly distributes mechanical stress, helping keep the cone's motion linear during high-excursion operation.
- The over-sized SBR rubber surround allows greater linear excursion while providing enhanced moving-mass control. This material also withstands the physical breakdown typical of common foam surrounds.

The coated cellulose/pulp cone and dustcap assembly is vented to aid in the exchange of air, which reduces acoustic losses and increases output.

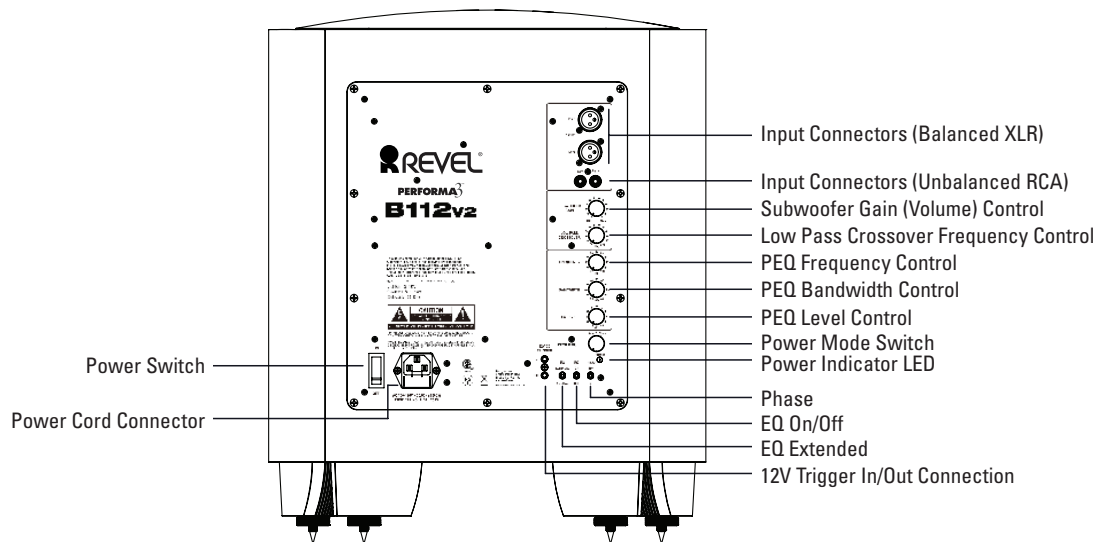
The transducer's massive Klippel-optimized magnet assembly (19.2 lb. in both the B112V2 and B110V2) features a double-stacked ceramic 5 magnet with a flared vent to improve airflow and reduce turbulence. The result is increased bass output and lower distortion. A thick motor shorting ring improves inductance linearity to further reduce distortion and increase output. Extra cooling vents in the back plate increase power handling and reduce power compression. Combined, these changes increase the linear excursion 82% from the previous version.

The cast aluminum frame is fully vented to minimize acoustic losses caused by excessive backpressure. This frame also maintains dimensional stability and precise mechanical tolerances, allowing the transducer to be assembled with a high degree of precision. The structure and mass of the frame make it very strong as well as help pull more heat away from the voice coil.

The B112V2 and B110V2 enclosures are formed with contiguous wood layers that prevent splitting. They feature strategically-oriented bracing that eliminates the possibility of vibration and coloration. The beautiful, modern enclosure is finished in high-gloss piano black, walnut or white in a process developed and overseen by Italian luxury cabinet makers that exceeds automotive finish quality.

During development, every Revel loudspeaker model is compared to competitive models in our unique position-independent double-blind listening lab. This process utilizes the latest psychoacoustic research to assure that these listening tests are valid, enabling us to verify that all Revel loudspeakers are superior to their competitors before they are allowed to go into production.

B112V2/B110V2 OVERVIEW (Note: B112V2 and B110V2 rear panels are identical)



Input connectors: Connect these to the outputs of a stereo preamp or connect a surround processor's subwoofer output to either the left or right input. Balanced (XLR) and unbalanced (RCA) connectors are available. The inputs are 0dBV nominal to +12dBV max unbal/+18dBV max bal. The XLR input is pin 2 hot.

Low Pass Crossover: The variable 50Hz – 150Hz crossover determines the frequency at which the subwoofer blends to the main speakers. When the control is turned to "LFE" the crossover is by-passed and all crossover settings are now set in the Processor or AVR menu.

NOTE: This control does not limit the frequency range of the main speakers in the system. Adjust the Low-Pass Crossover control to properly blend to the satellite speakers. When the blend is correct, notes of instruments and voice in the crossover region should sound correct in level; not too loud relative to the subwoofer frequencies or satellite frequencies, but also not too soft.

Subwoofer Gain control: Use this control to adjust the volume of the subwoofer relative to the system's other speakers.

Parametric Equalization (PEQ) controls: This set of equalization controls adjust for the dominant room mode at your listening position in your specific listening room. The parametric equalizer includes variable controls to adjust Frequency, Bandwidth, and EQ Level of one band of frequencies. To use these controls, you must first set the EQ switch to "ON".

NOTE: Specific measurement equipment is required to properly adjust the Equalization controls. Your authorized REVEL® dealer can make the appropriate measurements, using suitable equipment to ensure optimal results.

EQ Frequency control: selects the center frequency of the particular problem area. The range is from 32Hz to 100Hz.

EQ Bandwidth control: sets the range of frequencies over which the equalizer will have an effect. The range is from 0.1 octaves to 0.6 octaves; the higher the number the broader the range of frequencies that will be affected.

EQ Level control: Allows you to adjust how much boost or cut is applied to the selected frequency by the EQ Frequency Control. This control adjusts from -12dB to a maximum of +3dB.

EQ On/Off switch: Enables/Disables the parametric EQ controls (Frequency, Bandwidth, and EQ Level, but not Phase).

Extended On/Off switch: In the extended mode (ON), the -3 dB point is shifted from 29.5 Hz to 22.7 Hz in the B112V2 and from 32 Hz to 23.7 Hz in the B110V2.

NOTE: Using the extended setting will lower the maximum volume level the subwoofer can achieve. If you hear bass distortion during loud passages, discontinue use of the "extended" setting.

Phase switch: adjusts the phase of the subwoofer's output relative to the front speakers. Proper phase adjustment can also depend on variables such as the subwoofer placement and listener position. Set this switch for maximum mid-bass output at the primary listening position.

12V Trigger In/Out connectors: When the subwoofer's Power Mode Switch is set to "Trigger," the subwoofer will automatically turn on when 5V – 12V is present at the 12V Trigger In connection and will turn off when the voltage at this connection is removed. Whenever the subwoofer is on, a 12V trigger signal is available at its 12V Trigger Out connector for use with additional Performa3V2 subwoofers, or another triggerable device.

Power Mode switch: determines how the subwoofer will turn on and off:

- When this switch is set in the "Auto" position and the Power switch is set to "On," the subwoofer will automatically turn on when it first detects an audio signal at any of its inputs, and will automatically enter the standby mode after it has received no audio signal for ten (10) minutes.
- When this switch is set in the "On" position, the subwoofer will turn on when the Power switch is set to "On" and will remain on until the Power switch is set to "Off."
- When this switch is set in the "Trigger" position and the Power switch is set to "On," the subwoofer will automatically turn on when a voltage is present at the 12V Trigger In connection and will remain on as long as the voltage is present. When the voltage at the 12V Trigger In connection is removed the subwoofer will automatically turn off.

Power Mode indicator: The LED glows green when the power switch is set to On and there is signal at the input and/or a 12V trigger present. If the power switch is set to On but there is no signal after ten (10) minutes or there is no trigger voltage, then the LED will glow red. It will be unlit if the power switch is set to Off or the unit is receiving no power.

Power switch: When this switch is set to "On," the subwoofer's on/off status is dependent on the setting of the Power Mode switch (see above). When the Power switch is set to "Off" the subwoofer is turned off and cannot turn on automatically.

We suggest setting the Power switch in the "Off" position if you will not be using the subwoofer for a long period of time, such as when you're on vacation.

Power Cord connector: Plug the supplied power cord into this connector and into a working *unswitched* AC power outlet.



SUBWOOFER PLACEMENT CONSIDERATIONS

When using subwoofers within the limited confines of a typical home theater room, the reflections, standing waves and absorptions within the room will create peaks and dips in the bass response that can vary greatly depending on where the listeners are located in the room – a listener seated in one location may hear an overabundance of bass created by a response peak at that location, while another listener only a few feet away may hear far less bass due to a response dip at that location.

The subwoofers' locations within the room (along with the room's dimensions) also have a profound effect on the creation of these bass response peaks and dips. Careful subwoofer placement alone cannot compensate for all bass response peaks and dips throughout a room, but careful subwoofer placement can eliminate or significantly reduce the largest response dips.

It is important to reduce response dips throughout the room as much as possible via proper subwoofer placement because equalization cannot be used to compensate for large response dips. For example, using equalization in an attempt to restore a 13dB response dip requires that the subwoofer amplifier deliver twenty times the power at that frequency. This can quickly overdrive the subwoofer amplifier into clipping, which will significantly degrade audio quality.

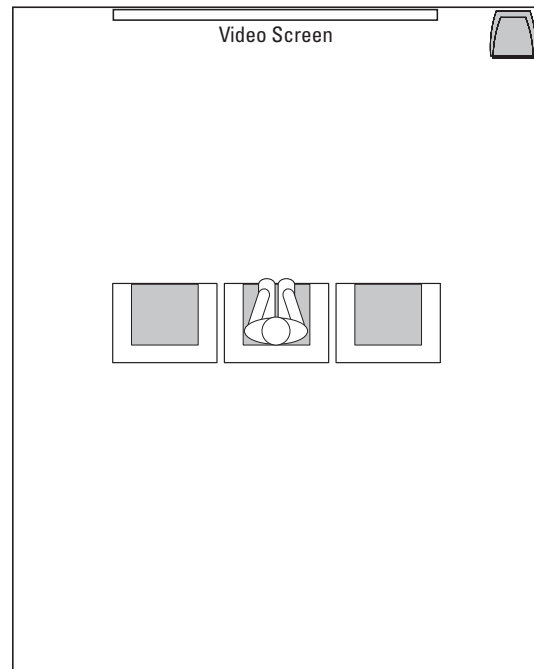
In almost any room, placing the subwoofers in corners will produce the fewest large bass response dips and will also produce the most large bass response peaks. With the subwoofers so placed, you can then use the built-in Parametric Equalizer (PEQ) to compensate for the most problematic frequency response anomaly.

We strongly recommend that you install multiple subwoofers regardless of the room's size. A single subwoofer will result in the least consistent bass performance throughout the room. Using multiple subwoofers can cancel some room modes at the various listening locations, resulting in much more consistent low frequency sound quality throughout the listening area. Additionally, it is often impossible to locate a single subwoofer such that large response dips, which cannot usually be corrected via equalization, are not present. The use of two or more properly placed subwoofers almost always eliminate such response dips.

Since wall construction is almost never perfectly identical on opposite walls, common formulas such as placing the subs at 1/4 points rarely work in practice. The best solution is to make high-resolution measurements from the primary listening area while experimenting with speaker placement.

PLACING A SINGLE SUBWOOFER

When installing a single subwoofer, experiment with different locations to find the one that produces the best results throughout your room's seating area. As in the previous examples, placing the subwoofer in a corner will produce the fewest number of deep response dips, which cannot be corrected with equalization.

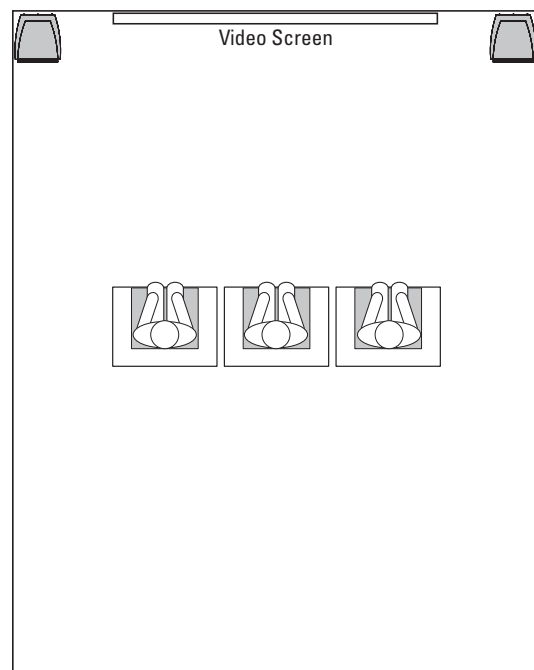


PLACING TWO SUBWOOFERS

Placement of two subwoofers will be determined by your room's seating arrangement.

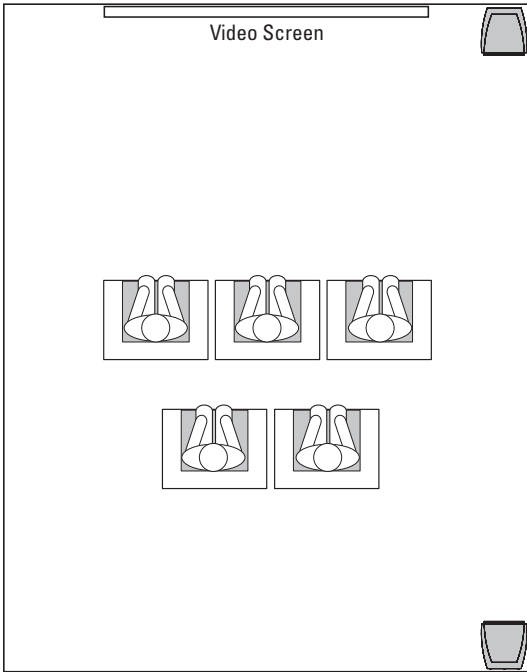
Rooms with a single row of seating

Placing the subwoofers in the two front corners will produce the most consistent bass performance throughout a single row of seating.



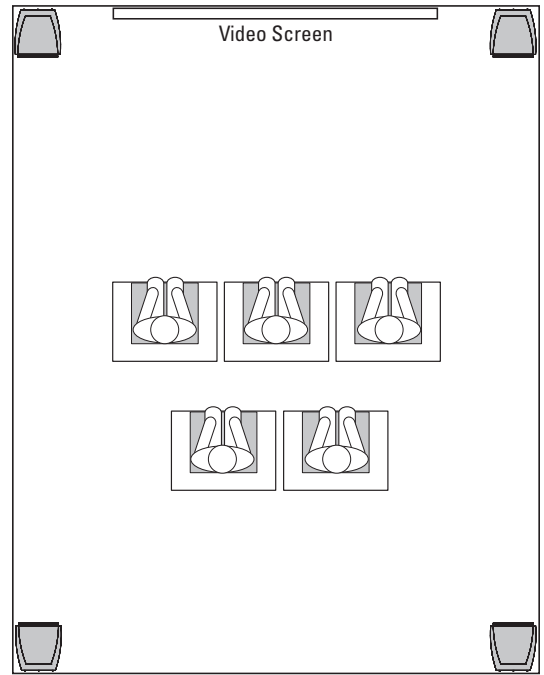
Rooms with multiple seating rows

Placing one subwoofer in a front corner and the other subwoofer in the rear corner on the same side will produce the most consistent bass performance throughout multiple seating rows.



PLACING FOUR SUBWOOFERS

When installing four subwoofers, place each one in a room corner. In rooms with more than four corners, use the four corners closest to the listening area.

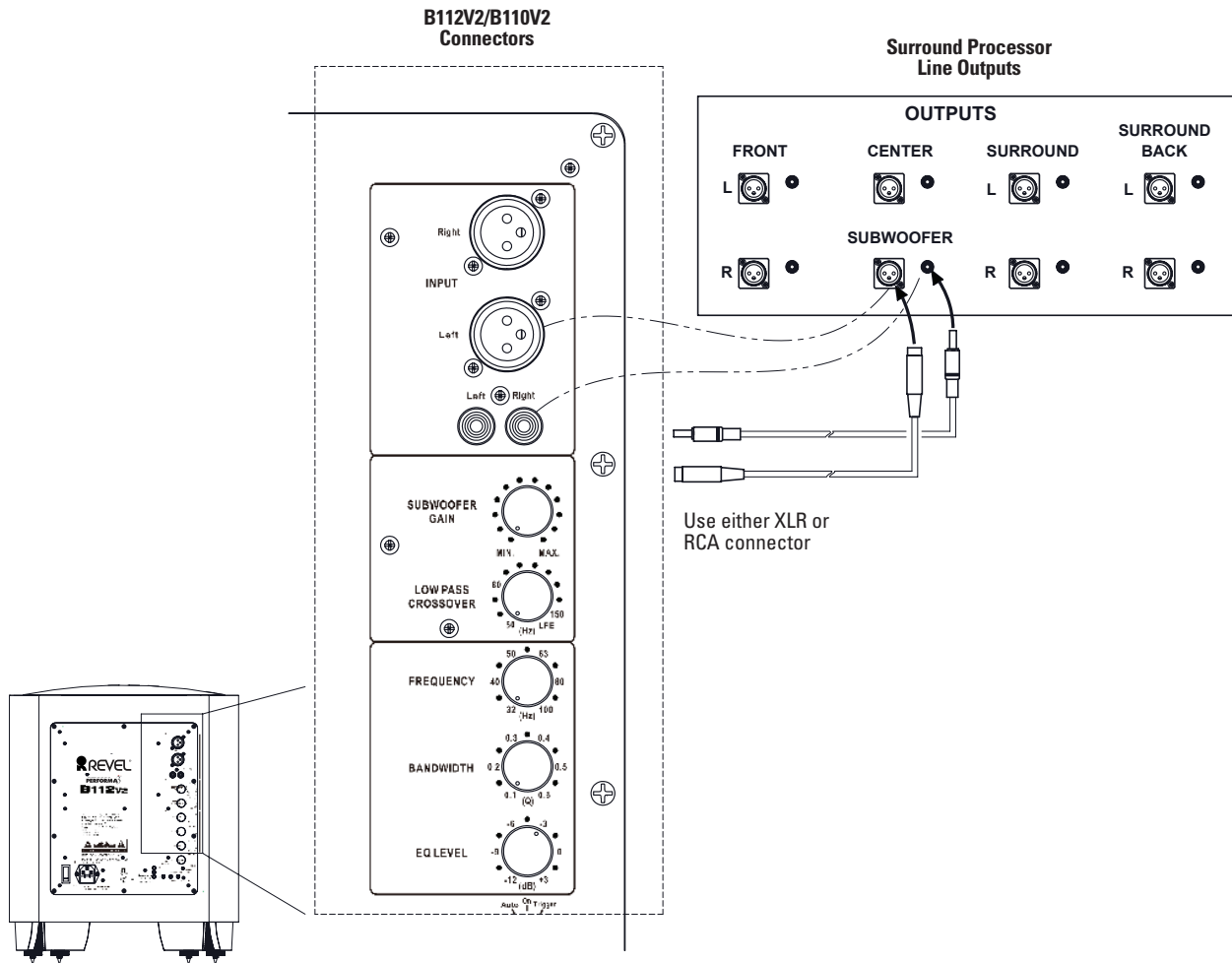


MAKING CONNECTIONS

CAUTION: Never make or break connections unless all system components are powered off.

CONNECTING TO AN AV SURROUND RECEIVER OR PROCESSOR WITH AN INTERNAL CROSSOVER

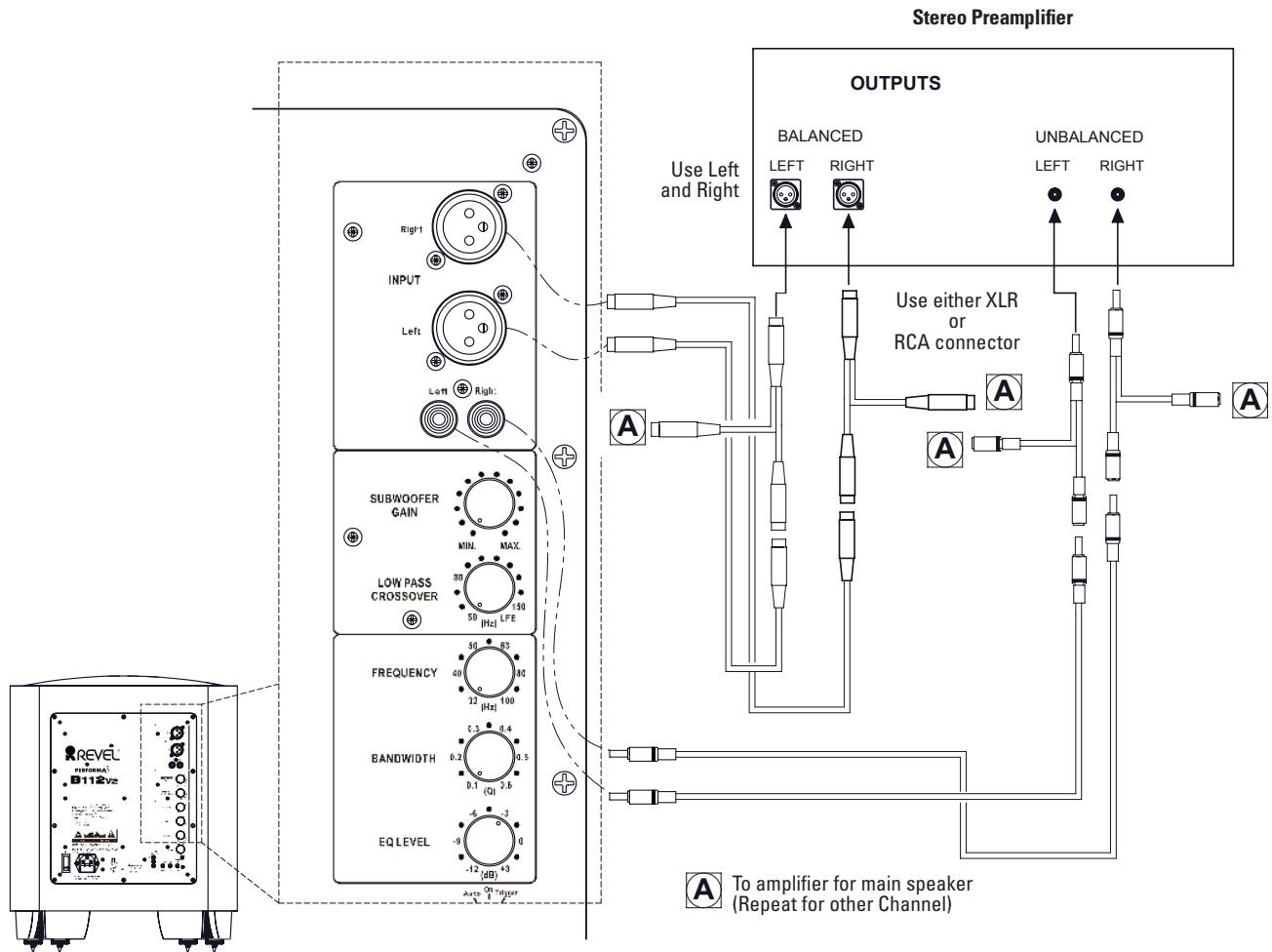
If you are connecting to a surround processor with a low-pass filtered subwoofer output, connect the subwoofer as shown below. You can make either a balanced (XLR) or unbalanced (RCA) connection to either the subwoofer's left or right input connector. When connecting to surround processors with internal crossovers, set the Low Pass Crossover control knob to the "LFE" position.



**CONNECTING TO A STEREO RECEIVER,
AMPLIFIER OR PREAMPLIFIER**

If you are connecting to a stereo device, connect the subwoofer as shown below. Stereo components rarely have subwoofer outputs. Use them if they are available; otherwise, be sure to use a Y-connector for the left output and one for the right output, connecting the subwoofer input to one side of each Y and the input for the left or right main speaker amplifier to the other side of the Y for proper main speaker operation. You can make either balanced (XLR) or unbalanced (RCA) connections between the device and the subwoofer.

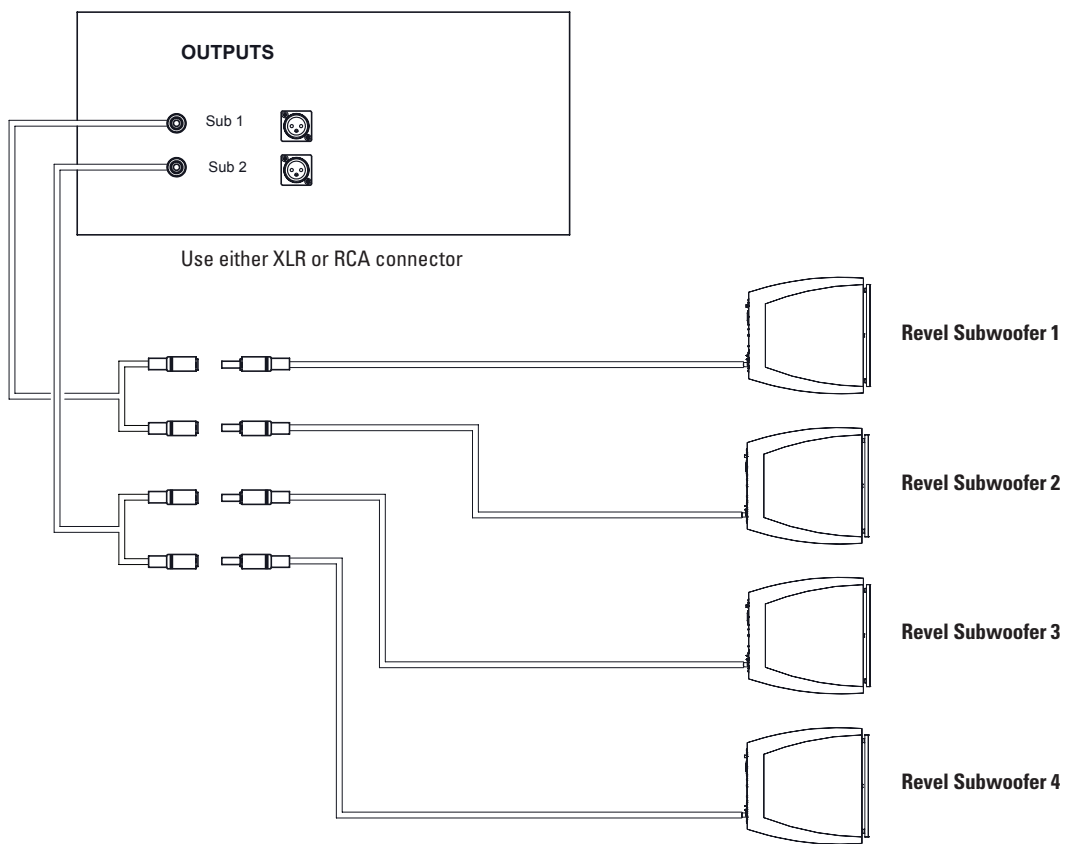
Using this connection method, you must set the Low Pass Crossover knob to some frequency between 50 – 150Hz, **NOT** on the “LFE” setting.



CONNECTING MULTIPLE SUBWOOFERS

When installing more than one Performa3V2 subwoofer, connect “Y” connectors to the receiver or processor’s outputs. If your source component has two subwoofer output jacks you can connect up to four subwoofers as illustrated on this page.

Be sure to set up and adjust each subwoofer PEQ separately, then adjust all of the subwoofer levels and crossover frequencies together to blend to the main speaker systems.



TRIGGER AND POWER CONNECTIONS

Trigger In/Out Connectors

If you want your subwoofer(s) to turn on along with another component that supplies a trigger voltage, use a mono 3.5mm cable (not supplied) to connect the 12V DC Trigger In connector to the trigger voltage out connector of the other component.

To supply a trigger signal to an additional Performa3 subwoofer (or other triggerable device), use a mono 3.5mm cable (not supplied) to connect the 12V DC Trigger Out connector of the first Performa3 subwoofer to the 12V DC Trigger In connector of the next Performa3 subwoofer. Connect additional Performa3 subwoofers this way, in “daisy-chain” fashion.

NOTE: When using the 12V Trigger to control the subwoofer power status, make sure the Power Mode Switch on each subwoofer is set to the “Trigger” position.

Power Cord

After you have ensured that all connections have been correctly made, plug the supplied power cord into the subwoofer’s Power Cord connector and into a working *unswitched* AC power outlet.

CARING FOR YOUR SUBWOOFER

The cabinet’s wood veneer finish does not require routine maintenance. Cabinet surfaces that have been marked with dust, fingerprints, or other dirt can be cleaned using a soft cloth – preferably microfiber, and high-quality auto wax. Take care not to come in contact with the transducer.

- Do NOT use wax on the top trim piece. Doing so will make the flat-black lacquered trim piece glossy and the original finish cannot be restored. If cleaning this trim is necessary, wipe it with a clean dry soft cloth only – preferably microfiber.

To clean the grille, gently vacuum it using a soft-bristled brush vacuum attachment with the vacuum cleaner set to the lowest possible suction.

CAUTION: To prevent cabinet damage, do not use metal polish or a cloth made with steel wool to clean the cabinet. Do not spray furniture polish and cleaning fluids directly on to the cabinet; apply them to the cleaning cloth then wipe the cabinet. To prevent possible transducer damage, never touch or clean the transducers.



SPECIFICATIONS

B112V2/B110V2

Type:	Powered subwoofer
Low-frequency transducer:	Coated paper/pulp cone (12" – B112V2; 10" – B110V2) with 50mm two-layer copper voice coil, vented ceramic 5 magnet assembly and vented die-cast aluminum frame
Amplifier power:	1,000 watts (RMS), 2,000 watts (peak)
Input sensitivity/impedance:	400mV (full power)/20k ohms (balanced); 14k ohms (unbalanced)
Crossover frequency:	50Hz – 150Hz low-pass filter with LFE bypass
Low Frequency Extension (Normal mode):	-3dB at 34.4Hz, -6dB at 30Hz, -10dB at 27Hz (B110V2) -3dB at 29.5Hz, -6dB at 27Hz, -10dB at 24Hz (B112V2)
Low Frequency Extension (Extended mode):	-3dB at 30Hz, -6dB at 27Hz, -10dB at 24Hz (B110V2) -3dB at 29Hz, -6dB at 26Hz, -10dB at 23Hz (B112V2)
Enclosure type:	Sealed
Inputs:	Balanced (XLR); unbalanced (RCA)
Available finishes:	High-gloss walnut, black and white
Dimensions (H x W x D):	
B112V2:	18-7/16" x 15-15/16" x 16-9/16" (468mm x 404mm x 420mm), with grille
B110V2:	16-7/8" x 14-5/16" x 13-7/16" (428mm x 364mm x 342mm), with grille
Weight:	
B112V2:	64.8 lb (29.4kg)
B110V2:	53.8 lb (24.4kg)

LIMITED WARRANTY

Revel loudspeakers are warranted against defects. The duration of a warranty depends on the laws in the country in which it was purchased. Your local Revel retailer can help you determine the duration and coverage of your warranty.

For more information please visit: REVELSPEAKERS.COM

Please visit REVELSPEAKERS.COM for additional language support on the user manual.

Veuillez visiter REVELSPEAKERS.COM pour obtenir le mode d'emploi en d'autres langues.

Para obter o manual do usuário em outros idiomas, acesse REVELSPEAKERS.COM

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사용자 설명서에 대한 추가 언어 지원은 REVELSPEAKERS.COM 에서 확인하십시오

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Торговая марка:	Revel
Назначение товара:	Активная акустическая система
Изготовитель:	Харман Интернешнл Индастриз Инкорпорейтед, США, 06901 Коннектикут, г.Стэмфорд, Атлантик Стрит 400, офис 1500
Страна происхождения:	Индонезия
Импортер в Россию:	ООО "ХАРМАН РУС СиАйЭс", Россия, 127018, г.Москва, ул. Двинцев, д.12, к 1
Гарантийный период:	1 год
Информация о сервисных центрах:	www.harman.com/ru тел. +7-800-700-0467
Срок службы:	5 лет
Срок хранения:	не ограничен
	Товар сертифицирован EAC
Дата производства:	Дата изготовления устройства определяется по двум буквенным обозначениям из второй группы символов серийного номера изделия, следующих после разделительного знака «-». Кодировка соответствует порядку букв латинского алфавита, начиная с января 2010 года: 000000-MY0000000, где «M» - месяц производства (А - январь, В - февраль, С - март и т.д.) и «Y» - год производства (А - 2010, В - 2011, С - 2012 и т.д.).

产品中有害物质的名称及含量

部件名称	目标部件	有害物质或元素					
		铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
电路板	印刷电路板, 电路板上的电子零件 (不包括特定电子零件), 内部相关连接线	X	0	0	0	0	0
框体	外壳, 面板, 背板等	X	0	0	0	0	0
特定电子零 部件	变压器, 保险丝, 大型电解电容, 电源插座	X	0	0	0	0	0
附件	电线, 说明书, 包装等	X	0	0	0	0	0

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