

PV[®]23XO

2-Way Stereo/3-Way Mono Crossover





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.



Intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: Risk of electrical shock — DO NOT OPEN!

CAUTION: To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To prevent electrical shock or fire hazard, this apparatus should not be exposed to rain or moisture, and objects filled with liquids, such as vases, should not be placed on this apparatus. Before using this apparatus, read the operating guide for further warnings.



Este símbolo tiene el propósito, de alertar al usuario de la presencia de “(voltaje) peligroso” sin aislamiento dentro de la caja del producto y que puede tener una magnitud suficiente como para constituir riesgo de descarga eléctrica.



Este símbolo tiene el propósito de alertar al usuario de la presencia de instrucciones importantes sobre la operación y mantenimiento en la información que viene con el producto.

PRECAUCION: Riesgo de descarga eléctrica ¡NO ABRIR!

PRECAUCION: Para disminuir el riesgo de descarga eléctrica, no abra la cubierta. No hay piezas útiles dentro. Deje todo mantenimiento en manos del personal técnico cualificado.

ADVERTENCIA: Para prevenir choque eléctrico o riesgo de incendios, este aparato no se debe exponer a la lluvia o a la humedad. Los objetos llenos de líquidos, como los floreros, no se deben colocar encima de este aparato. Antes de usar este aparato, lea la guía de funcionamiento para otras advertencias.



Ce symbole est utilisé dans ce manuel pour indiquer à l'utilisateur la présence d'une tension dangereuse pouvant être d'amplitude suffisante pour constituer un risque de choc électrique.



Ce symbole est utilisé dans ce manuel pour indiquer à l'utilisateur qu'il ou qu'elle trouvera d'importantes instructions concernant l'utilisation et l'entretien de l'appareil dans le paragraphe signalé.

ATTENTION: Risques de choc électrique — NE PAS OUVRIR!

ATTENTION: Afin de réduire le risque de choc électrique, ne pas enlever le couvercle. Il ne se trouve à l'intérieur aucune pièce pouvant être réparée par l'utilisateur. Confiez l'entretien et la réparation de l'appareil à un réparateur Peavey agréé.

AVIS: Dans le but de réduire les risques d'incendie ou de décharge électrique, cet appareil ne doit pas être exposé à la pluie ou à l'humidité et aucun objet rempli de liquide, tel qu'un vase, ne doit être posé sur celui-ci. Avant d'utiliser de cet appareil, lisez attentivement le guide fonctionnant pour avertissements supplémentaires.



Dieses Symbol soll den Anwender vor unisolierten gefährlichen Spannungen innerhalb des Gehäuses warnen, die von Ausreichender Stärke sind, um einen elektrischen Schlag verursachen zu können.



Dieses Symbol soll den Benutzer auf wichtige Instruktionen in der Bedienungsanleitung aufmerksam machen, die Handhabung und Wartung des Produkts betreffen.

VORSICHT: Risiko — Elektrischer Schlag! Nicht öffnen!


VORSICHT: Um das Risiko eines elektrischen Schlages zu vermeiden, nicht die Abdeckung entfernen. Es befinden sich keine Teile darin, die vom Anwender repariert werden könnten. Reparaturen nur von qualifiziertem Fachpersonal durchführen lassen.

WARNUNG: Um elektrischen Schlag oder Brandgefahr zu verhindern, sollte dieser Apparat nicht Regen oder Feuchtigkeit ausgesetzt werden und Gegenstände mit Flüssigkeiten gefüllt, wie Vasen, nicht auf diesen Apparat gesetzt werden. Bevor dieser Apparat verwendet wird, lesen Sie bitte den Funktionsführer für weitere Warnungen.

IMPORTANT SAFETY INSTRUCTIONS



WARNING: When using electrical products, basic cautions should always be followed, including the following:

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point they exit from the apparatus.
11. Note for UK only: If the colors of the wires in the mains lead of this unit do not correspond with the terminals in your plug, proceed as follows:
 - a) The wire that is colored green and yellow must be connected to the terminal that is marked by the letter E, the earth symbol, colored green or colored green and yellow.
 - b) The wire that is colored blue must be connected to the terminal that is marked with the letter N or the color black.
 - c) The wire that is colored brown must be connected to the terminal that is marked with the letter L or the color red.
12. Only use attachments/accessories provided by the manufacturer.
13. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
14.  Unplug this apparatus during lightning storms or when unused for long periods of time.
15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
16. Never break off the ground pin. Write for our free booklet "Shock Hazard and Grounding." Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
17. If this product is to be mounted in an equipment rack, rear support should be provided.
18. Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures:

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Ear plugs or protectors to the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss, if exposure is in excess of the limits as set forth above. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

SAVE THESE INSTRUCTIONS!

PV[®]23XO 2-Way Stereo/3-Way Mono Crossover

Description

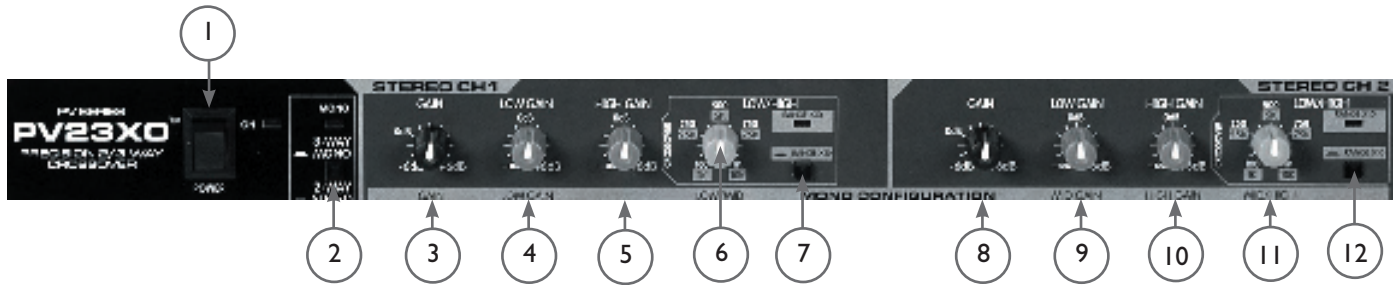
Thank you for purchasing a Peavey Electronics PV 23XO 2-Way Stereo/3-Way Mono Crossover. The PV 23XO is a two dual-channel crossover incorporating Peavey's legendary low-noise, low-distortion design. Ruggedly constructed, PV 23XO gives the operator the flexibility to establish a two-way stereo system or run in a three-way mono configuration. The PV 23XO has variable-state filter controls with 24 dB per octave filters and utilizes XLR inputs and outputs for balanced operation from 20 Hz to 20 kHz.

Features

- ➔ **2-way stereo/3-way mono operation**
- ➔ **Variable-state filter controls**
- ➔ **24 dB/octave filters**
- ➔ **XLR inputs and outputs for balanced operation**
- ➔ **20 Hz to 20 kHz operation**

STEREO MODE OPERATION

FRONT PANEL



POWER SWITCH (1)

This 2-position rocker switch applies mains power to the unit when in the ON position. The red LED located to the right of the Power switch indicates that power is ON.

MODE SWITCH (2)

This switch selects between stereo 2-way operation and mono 3-way operation. The red LED above the Mode switch indicates mono mode.

INPUT GAIN CONTROL (Channel 1) (3)

This control is used to optimize the channel 1 gain between the mixer and the power amps for channel 1. Control range is between 0 dB and +12 dB.

LOW GAIN CONTROL (Channel 1) (4)

Controls output level of channel 1 low frequency signal (signal below the selected crossover point) present at channel 1 low output XLR.

HIGH GAIN CONTROL (Channel 1) (5)

Controls output level of channel 1 high frequency signal (signal above the selected crossover point) present at channel 1 high output XLR.

CROSSOVER SELECTOR CONTROL (Channel 1 Lows/Highs) (6)

Allows user to choose their desired crossover point for lows and highs for channel 1. Control range is between 100 Hz and 1 kHz or 1 kHz and 10 kHz depending on the position of the Range Switch.

RANGE (x10) SWITCH (Channel 1 lows/highs) (7)

This switch multiplies the value indicated on the Crossover Selector Control times 10. When engaged, the range will change from 100 Hz to 1 kHz through 1 kHz to 10 kHz. Range x10 is indicated by illumination of the red LED above the switch.

INPUT GAIN CONTROL (Channel 2) (8)

This control is used to optimize the channel 2 gain between the mixer and the power amps for channel 2. Control range is between 0 dB and +12 dB.

LOW GAIN CONTROL (Channel 2) (9)

Controls output level of channel 2 lows signal (signal below the selected crossover point) present at channel 2 low output XLR.

⚡ WARNING ⚠

THE ON/OFF SWITCH IN THIS APPARATUS DOES NOT BREAK BOTH SIDES OF THE MAINS. HAZARDOUS ENERGY MAY BE PRESENT INSIDE THE ENCLOSURE WHEN THE POWER SWITCH IS IN THE OFF POSITION.

HIGH GAIN CONTROL (Channel 2) (10)

This controls output level of channel 2 highs signal (signal above the selected crossover point) present at channel 2 high output XLR.

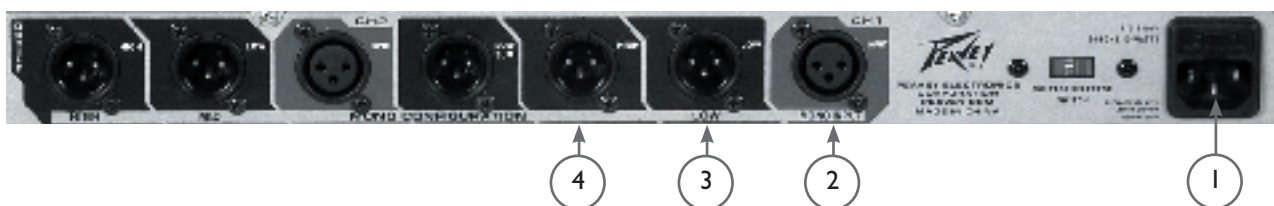
CROSSOVER SELECTOR CONTROL (Channel 2 lows/highs) (11)

This allows users to choose their desired crossover point for lows and highs for channel 2. The control range is between 100 Hz and 1 kHz or 1 kHz and 10 kHz, depending on the position of the Range switch.

RANGE (x10) SWITCH (Channel 2 lows/highs) (12)

This switch multiplies the value indicated on the Crossover Selector Control times 10. When engaged, the range will change from 100 Hz to 1 kHz through 1 kHz to 10 kHz. Range x10 is indicated by the illumination of the red LED above the switch.

REAR PANEL



IEC MAINS CONNECTOR (1)

This is a standard IEC power connector. An AC mains cord having the appropriate AC plug and ratings for the intended operating voltage is included in the carton.



Never break off the ground pin on any equipment. It is provided for your safety. If the outlet used does not have a ground pin, a suitable grounding adapter should be used and the third wire should be grounded properly. To prevent the risk of shock or fire hazard, always make sure that the equalizer and all associated equipment is properly grounded.

Incorporated into this IEC MAINS CONNECTOR is the MAINS FUSE HOLDER. If for any reason you are unable to power up this unit, remove the fuse by pulling out the holder. Check to see if the fuse is operational. If not, then replace with a fuse of the appropriate value and rating. If the fuse continues to fail contact your nearest Certified Peavey Service Center.

INPUT (Channel 1) (2)

This XLR female 3-pin connector provides a balanced input for channel 1.

LOW OUTPUT (Channel 1) (3)

This XLR male 3-pin connector provides a balanced output for the low frequencies for channel 1.

HIGH OUTPUT (Channel 1) (4)

This XLR male 3-pin connector provides a balanced output for the high frequencies for channel 1.

REAR PANEL



LOW SUM OUTPUT (5)

This XLR male 3-pin connector provides a balanced output for the low frequencies for both channel 1 and channel 2, which been summed (added) together.

INPUT (Channel 2) (6)

This XLR female 3-pin connector provides a balanced input for channel 2.

LOW OUTPUT (Channel 2) (7)

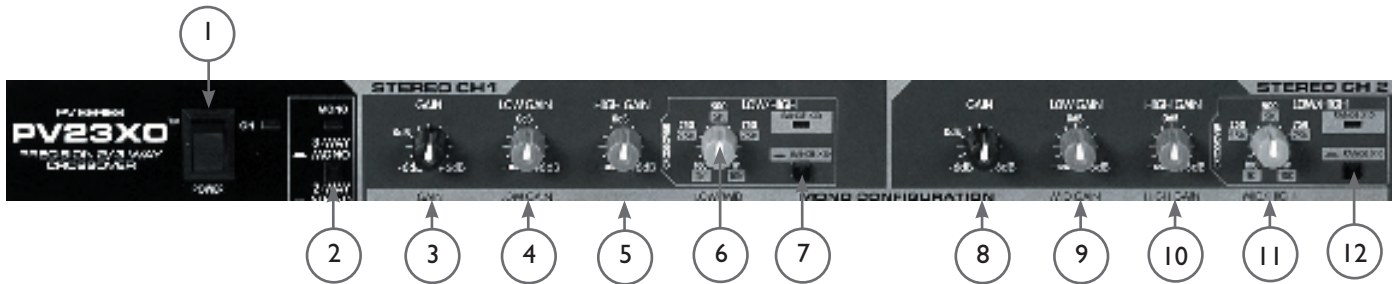
This XLR male 3-pin connector provides a balanced output for the low frequencies for channel 2.

HIGH OUTPUT (Channel 2) (8)

This XLR male 3-pin connector provides a balanced output for the high frequencies for channel 2.

MONO MODE OPERATION

FRONT PANEL



POWER SWITCH (1)

This 2-position rocker switch applies mains power to the unit when in the ON position. The red LED located to the right of the Power switch indicates that Power is ON.

MODE SWITCH (2)

This switch selects between stereo 2-way operation and mono 3-way operation. The red LED above the Mode switch indicates mono mode.

INPUT GAIN CONTROL (3)

This control is used to optimize the gain between the mixer and the power amps. The control range is between 0 dB and +12 dB.

LOW GAIN CONTROL (4)

This controls the output level of low frequency signals (those below the selected crossover point) present at the low output XLR.

HIGH GAIN CONTROL (Channel 1) (5)

This function is non-operational in MONO Mode.

CROSSOVER SELECTOR CONTROL (lows/mids) (6)

This allows the user to choose their desired crossover point for lows and mids. Control range is between 100 Hz and 1 kHz or 1 kHz and 10 kHz depending on the position of the Range Switch.

RANGE (x10) SWITCH (lows/mids) (7)

This switch multiplies the value indicated on the Crossover Selector Control times 10. When engaged, the range will change from 100 Hz to 1 kHz through 1 kHz to 10 kHz. Range x10 is indicated by the illumination of the red LED above the switch.

INPUT GAIN CONTROL (Channel 2) (8)

This function is non operational in MONO Mode.

MID GAIN CONTROL (9)

This controls the output level of mid signals (those below the selected crossover point) present at mid output XLR.

HIGH GAIN CONTROL (10)

This controls the output level of the highs (signals above the selected crossover point) present at high output XLR.

⚡ WARNING ⚡

THE ON/OFF SWITCH IN THIS APPARATUS DOES NOT BREAK BOTH SIDES OF THE MAINS. HAZARDOUS ENERGY MAY BE PRESENT INSIDE THE ENCLOSURE WHEN THE POWER SWITCH IS IN THE OFF POSITION.

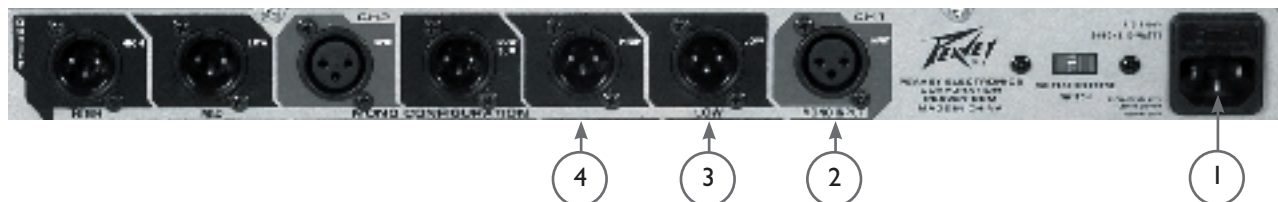
CROSSOVER SELECTOR CONTROL (mids/highs) (11)

This allows users to choose their desired crossover point for mids and highs. The control range is between 100 Hz and 1 kHz or 1 kHz and 10 kHz, depending on the position of the Range switch.

RANGE (x10) SWITCH (mids/highs) (12)

This switch multiplies the value indicated on the Crossover Selector Control times 10. When engaged, the range will change from 100 Hz to 1 kHz through 1 kHz to 10 kHz. Range x10 is indicated by the illumination of the red LED above the switch.

REAR PANEL



IEC MAINS CONNECTOR (1)

This is a standard IEC power connector. An AC mains cord having the appropriate AC plug and ratings for the intended operating voltage is included in the carton.



Never break off the ground pin on any equipment. It is provided for your safety. If the outlet used does not have a ground pin, a suitable grounding adapter should be used and the third wire should be grounded properly. To prevent the risk of shock or fire hazard, always make sure that the equalizer and all associated equipment is properly grounded.

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INPUT (2)

This XLR female 3-pin connector provides a balanced input.

LOW OUTPUT (3)

This XLR male 3-pin connector provides a balanced output for the low frequencies.

HIGH OUTPUT (Channel 1) (4)

This function is non-operational in MONO Mode.

REAR PANEL



LOW SUM OUTPUT (5)

This function is non-operational in MONO Mode.

INPUT (Channel 2) (6)

This function is non-operational in MONO Mode.

MID OUTPUT (7)

This XLR male 3-pin connector provides a balanced output for the mid frequencies.

HIGH OUTPUT (8)

This XLR male 3-pin connector provides a balanced output for the high frequencies.

PV[®] 23X0

2-Way Stereo/3-Way Mono

SPECIFICATIONS

CONTROLS AND SWITCHES

Channel Gain Control: 0 to +12 dB

Low Frequency Level Control: $-\infty$ to +6 dB

High Frequency Level Control: $-\infty$ to +6 dB

Low Frequency to High Frequency crossover: 100 Hz to 1 KHz x10 range: Changes Low Frequency to Mid Frequency from (100 Hz to 1 kHz) to (1kHz to 10 kHz)
2-way stereo/3-way mono changes the unit from 2-way stereo or 3-way mono

FREQUENCY RESPONSE

Each output is -3 dB at the selected crossover frequency value. Outputs are essentially flat within their relative passbands.

Distortion: Less than 0.02% THD @ +4 dBu, @ 1 kHz

Hum and Noise: Crossover controls set @ 1 kHz, all level controls set at 0 dB; 22 Hz to 22 kHz, unweighted gain @ 0dB(ref +4dBu) - 90dB

Low Frequency Output: -86 dBu below 80 dB

High Frequency Output: -84 dBu below -78 dB

Maximum Input Level: +14 dBu, (channel gain @ 0 dB input level controls set at 0 dB) +22 dBu

Maximum Output Level: +22 dBu, unbalanced +28 dBu, balanced

Input Impedance: 10 k ohms unbalanced

CONNECTORS

Inputs: XLR Balanced

Outputs: XLR Balanced

Power Requirements: 120V AC, 50/60 Hz, 20 watts (domestic model)



Features and specifications subject to change without notice.

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